

Mitigation Bank Handout

Table of Contents

- I. Mitigation Bank Fact Sheet
- II. Steps to Establishing a Mitigation Bank
- III. Mitigation Bank Review Team, Mississippi
- IV. Mitigation Banking – History and Concept
- V. Federal Guidelines for the Establishment, Use and Operation of Mitigation Banks
- VI. Prospectus Checklist
- VII. Mitigation Bank Agreement (Instrument) Template

I. Mitigation Bank Fact Sheet

Mitigation Banking is the restoration, enhancement, and in exceptional circumstances, preservation undertaken to compensate in advance for adverse impacts to the aquatic ecosystem.

1. The proposed mitigation bank site must be capable of becoming a wetland.
2. The more improvements that are made to the mitigation bank site, the more credits that will be realized for the bank.
3. Full restoration credits are generally only given to areas to which the hydrology has been restored and then were replanted.
4. CRP land can be considered for a mitigation bank if it is out of the program and is a wetland or capable of becoming a wetland.
Generally, CRP land can only receive preservation credits. If the soils are hydric and the hydrology is restored, some enhancement credits may be given.
5. The hydrology must be restored so that the site is connected naturally to the watershed. No mechanical manipulation of the water is allowed.

II. Steps to Establishing a Mitigation Bank

1. The Sponsor must provide a prospectus to the Corps who will distribute it to the Mitigation Bank Review Team (MBRT) for review. The prospectus includes information about the current condition of the proposed mitigation bank site. The sponsor will be provided with a checklist of information to be included in the prospectus.
2. The MBRT will make a site visit to determine the potential of the area for becoming a mitigation bank.
3. A Wetland Delineation of the site must be provided using data sheets from the 1987 Wetland Delineation Manual. If the site is not a wetland, then the Sponsor must address how the site is capable of becoming a wetland.
4. The Sponsor submits a draft Mitigation Banking Instrument (MBI) to the Corps for distribution to the MBRT. The MBI documents the establishment and operation of the bank and provides details on the service area, credit calculations, credit release schedule, conservation easement, and escrow account. The members of the MBRT review and comment on the MBI which is then finalized and submitted for signatures.

III. Mitigation Bank Review Team Mississippi

U.S. Army Corps of Engineers – Team Chair
Anne Woerner
601 631-5298
Anne.S.Woerner@mvk02.usace.army.mil

U.S. Fish and Wildlife Service - Jackson
David Felder
601 321-1139
David_Felder@fws.gov

U.S. Environment Protection Agency - Atlanta
William Ainslie
404 562-9400
Ainslie.William@epamail.epa.gov

Mississippi Department of Environmental Quality
Andy Sanderson
601 961-5578
Andy_Sanderson@deq.state.ms.us

Mississippi Department of Wildlife, Fisheries, and Parks
John Tindall
601 432-2202
johnt@mdwfp.state.ms.us

IV. Mitigation Banking – History and Concept

Mitigation Banking

History and Concept

Wetlands mitigation banking is the creation, restoration, or under certain circumstances the increased protection, of an area of functioning wetland in advance of, and to offset anticipated wetland impacts within the same ecoregion. This concept originated in response to the initiation of wetland regulatory programs, and was intended to expedite the regulatory approval process for allowing wetland impacts. As wetland regulations were originally implemented, developers and governmental agencies with regular construction needs, such as departments of transportation, faced recurring and unpredictable time delays and costs in obtaining permitting approval for projects that involved wetland impacts. They sought a means of advance planning that would make the permitting process more reliable and would minimize costs. From this need the concept of mitigation banking emerged. Banking includes creation, restoration or enhancement of degraded wetland and, in rare cases, providing more stringent protection for wetland or wetland/upland habitat associations that are otherwise threatened by human activities not subject to regulatory control. Throughout this discussion, the term "bank" will imply a unified planning effort involving any of these advance forms of wetland mitigation, singly or in combination.

The general process occurs as follows. The need for a bank is identified by a transportation agency with road construction needs; local or state government planning agency identifying watershed restoration needs; developer planning a large, phase project; commercial entrepreneur; or other party anticipating future mitigation needs in a given area. All banks require the acquisition or possession of a long-term interest in a piece of land by such a corporate, non-profit, or government "sponsor". The site is chosen based on suitability to support the anticipated wetland functional needs. The sponsor establishes dialogue with relevant wetland permitting agencies during these early planning stages. Agencies strongly encourage or require, depending on regulatory jurisdiction, submittal of information on the character of the bank. The bank is designed, depending on its goals, to replace either the anticipated functional losses or identified historical functional losses within a specified trading area. Watershed boundaries are often used to define the trading area based on water resource replacement rationales, but

ecoregional or other boundaries may also be used. Regardless of the type of bank created, its value is determined by quantifying the created or restored wetland functions in terms of "credits." Credits may be calculated simply by the amount of acreage and the wetland type, by quantifying habitat, or by quantifying physical and biological functions and social values (IWR 1992). At some point, a permit or other instrument is finalized establishing the bank's: goals, ownership, location, size, wetland and/or other resource types included, trading area, crediting methods and accounting procedures, performance and success criteria, monitoring and reporting protocol, contingency plans, financial assurances, long-term responsibility, and detailed construction plans (Federal Register 1995). Subsequent permit applicants proposing wetland impacts that meet the bank criteria must first meet all other normal wetland permitting requirements imposed by an agency, such as avoidance and minimization of impacts prior to proposing mitigation. Such applicants can then withdraw "debits" from the bank based on anticipated wetland functional losses due to their development activities.

Federal Banking Guidelines

Final, joint federal agency guidance, effective December 28, 1995, encourages the establishment and appropriate use of mitigation banks in the Clean Water Act Section 404 and Farm Bill Swampbuster programs (Federal Register 1995). The guidance defines mitigation banking as: wetland restoration, creation, enhancement, and in exceptional circumstances, preservation undertaken expressly for the purpose of compensating for unavoidable wetland losses in advance of development actions, when such compensation cannot be achieved at the development site or would not be as environmentally beneficial.

It further states that banking typically involves consolidation of small fragmented mitigation projects into one large contiguous site. Banks, ideally functioning in advance of development impacts, are seen as a way of reducing uncertainty in the federal permitting programs by having credit available to applicants. They can also more effectively replace lost wetland functions within a watershed by consolidating compensation requirements, and can provide economies of scale relating to planning, implementation, monitoring and management of mitigation projects. The guidelines stress that credits may only be authorized when adverse impacts are unavoidable.

Procedurally, prospective bank sponsors are encouraged to first discuss their proposal with the appropriate agencies, then to submit a **prospectus** to the Corps or the NRCS to initiate the formal agency review process. The prospectus should discuss the objectives of the bank and how it will be established and operated. It should include detailed physical and legal characteristics such as those identified above in the concept sub-section. The prospectus will be reviewed by a Mitigation Bank Review Team with representatives from each relevant agency. This team and the bank sponsor will eventually agree on an "instrument" that embodies the information in the prospectus.

The sponsor will be responsible for the bank wetlands' physical success, including monitoring, reporting, and remedial action, and for successful operation of the exchange system. The expected monitoring period is five years, longer for forested and other projects. The greater the risk of bank failure, the higher the financial assurances required. The instrument should identify long-term management/ownership of the bank resources. The bank resources should be protected in perpetuity with appropriate real estate arrangements, such as conservation easements or transfer of title to an agency or non-profit conservation organization.

The guidelines identify a number of notable planning considerations. They encourage setting the objectives for a bank in advance of site selection, driven by the anticipated mitigation need. Ecological suitability of a site will be weighed by the agencies, with importance placed on size and location of the site relative to other ecological features, hydrologic sources, compatibility with adjacent land uses and watershed management plans, and other factors.

On the issue of types of acceptable compensatory mitigation, the guidelines state that, "In-kind compensation should generally be required. Out-of-kind compensation may be acceptable if it is determined to be practicable and environmentally preferable to in-kind compensation (e.g., of greater ecological value to a particular region)." As with normal compensation protocol, restoration should be the first option considered when siting a bank, since it typically has the greatest likelihood of success. Preservation of wetlands or other aquatic resources may be given credit if it is done in conjunction with restoration, creation or enhancement of wetlands, and to the extent that such preservation augments the functions of the created, restored, or enhanced wetlands. Further, preservation of wetlands may be authorized as the sole basis for generating credits in

mitigation banks only in exceptional circumstances requiring careful judgement. Two key factors to be judged are whether the wetlands proposed for preservation: perform functions important to the region; and "are under demonstrable threat of loss or substantial degradation due to human activities that might not otherwise be expected to be restricted. The existence of a demonstrable threat will be based on clear evidence of destructive land use changes which are consistent with local and regional land use trends and are not the consequence of action under the control of the bank sponsor." Credit may be given for the inclusion of upland areas within a bank "only to the degree that such features increase the overall ecological functioning of the bank."

The desire to withdraw credits from a bank before it "matures" or is fully functional, invariably arises in mitigation bank projects. The general approach outlined is that the number of credits available for withdrawal should be commensurate with the functional level attained by a bank at the time of withdrawal. The agencies identify minimum actions to be taken before withdrawals will be allowed, involving approval of mitigation plans, acquisition of the site, and establishment of financial assurances. In addition, they state that "initial physical and biological improvements should be completed no later than the first full growing season following initial debiting of a bank. In these circumstances, where withdrawals are made prior to construction, higher compensation ratios may be required to offset temporal loss of functions that occurs (see below).

The federal track record on mitigation bank permitting prior to formal adoption of the guidelines extends back to the early 1980's under the Clean Water Act Section 404 program (ELI 1992 Short, 1988). Approximately 100 mitigation banks are already in operation or are being constructed in 34 states across the country (IWR 1992, Salveson 1995). Most banks are owned and operated by state transportation departments, port authorities and federal agencies. An increasing number of entrepreneurial banks, known as commercial banks, are selling mitigation credits on the market (IWR 1992, Salveson 1995). These banks offer the economy-of-scale advantages of large-scale projects and greater planning flexibility for developers (Kusler 1992).

Banking Issues

Temporal Loss of Wetland Functions:

Ideally, mitigation banks should be created in advance of proposed development activities, and should be functionally equivalent to the wetland being impacted before credits are withdrawn. In common practice, even government agencies, such as state departments of transportation, may plan and budget only a few years in advance and have only some idea of their mitigation needs (IWR 1992). Yet, bank planning and the permitting process alone may take up to a few years, while subsequent implementation and functional establishment of banks can take at least ten years, with no guarantee of success. This incompatibility raises the issues of temporal loss of wetland functions and remedial/alternative planning and responsibility and brings into question the practice of granting credit exchanges at a one-to-one ratio in advance of the existence of a functioning bank. A bank that is not constructed in advance of wetland impacts results in temporal loss of wetland functions, and is similar in that regard to wetland mitigation that occurs under normal (non-banked) wetland permitting scenarios. Construction of bank wetlands could potentially be delayed even beyond the time of debited wetland impacts, since with the banking process, impact and mitigation are not directly coupled in the same permit application and the same development site as they are under normal permitting scenarios. One method of offsetting this temporal loss of function is to require a greater ratio of mitigation-to-impact wetland acreage than one-to-one, as recommended in the recent federal guidance. In this case, the method of quantifying ratios becomes an issue, since a greater quantity of an early successional habitat does not truly replace the lost system, and amounts to trading apples and oranges, or more appropriately, trading green oranges and ripe oranges. Some observers believe that given the historic losses of wetlands in the U.S., and the less-than-certain nature of wetland creation technology in general, wetland impacts should not be allowed prior to full functional establishment of bank wetlands, or at least prior to reasonable assurance of successful establishment based on monitoring indications. However, such a policy would be unreasonable without similarly changing normal wetland permitting criteria, which accept concurrent wetland impacts and mitigation area construction as routine. In any case, the issue of temporal loss of wetland functions offers no easy answers.

Other Functional Replacement Issues:

While financial assurances may reduce bank failure rates, they do not ensure that success will equate to type-for-type replacement. Unless bank functional criteria are established

during permitting, simple, low-cost systems, such as ponds with water lilies, that may perform as wetlands in the broad sense but are functionally unlike impacted wetlands, could become more common (Salveson 1995). Such systems are typically easier to establish and not functionally equivalent to the complex natural systems for which they are traded (see Mitigation Success section).

The issue of functional replacement must be addressed during permitting. Several questions arise here. One of these is how specific the functional replacement must be. The concept of a mitigation bank involves predicting both the types of habitat and the proportions of those habitat types that will need to be impacted by future development within the trading area. At so high a level of functional specificity, there will be unavoidable inability to predict or replicate site-specific elements of wetlands. Agencies must perform the difficult tasks of setting defensible practical limits on the degree of functional replacement required, and of establishing protocol for situations where insufficient similarity is achieved or where unequal proportions of the different habitats are created. In these cases, criteria for the trading of "apples and oranges" must be established, or agencies may be placed in the unpopular position of requiring remedial actions on desirable but differently functioning wetland habitat.

Another question related to functional replacement involves spatial replacement of functions. The broadest issue here is establishment of the spatial applicability, or trading limits of the bank. Wetlands perform many functions, and spatial limits set for habitat functions provided for certain species may not coincide with those set for water quality values provided to a watershed. Also, practical considerations related to including sufficient future development area to generate the acreage of impacts being offset by the bank to make the bank economically supportable arise as well. In practice, most banks use hydrologic spatial (i.e. watershed) boundaries because of the ease of definition and the relatively universal likelihood of water quality and quantity functions and values being at stake. The recent federal guidance bases limits of the bank "service area" on hydrologic and biotic criteria, and recommends using watershed or ecoregional boundaries (Federal Register 1995).

A difficult part of spatial replacement of functions stems from the effect of location or landscape position on the functions performed by wetlands. A wetland targeted for impact may provide local water storage functions, species habitat that depends on

the wetland's landscape position, or local water quality functions. These functions may be lost through the banking process, since bank wetlands may be created a significant distance away from impact wetlands or in a different landscape position. Replication of such landscape position-derived functions can even be strongly at odds with the concept of creating one large wetland system to offset numerous small future impacts. For example, small isolated wetlands in upland landscapes perform many habitat functions that would be lost in a large wetland hydrologically tied into a floodplain (Robinson 1995, Means 1990, Laney 1988, Moler 1987, Beissinger and Takekawa 1983, Kushlan 1981). Regulatory agencies should be vigilant to maintain this often-overlooked but important issue in the list of considerations that go into banking negotiations. They may need to exclude the use of banks for certain types of wetland impacts, or require designs to incorporate upland areas that recreate certain landscape functions.

The recent federal guidance gives no strong direction on this issue. It recognizes that on-site mitigation may be preferable in the types of circumstances described above, but states that this should not preclude the use of a bank when there is no practicable opportunity for on-site compensation. Criteria given for choosing between the two include: the likelihood for success of the given habitat type; compatibility of the mitigation with adjacent land uses; and "practicability of long-term monitoring and maintenance to determine whether the effort will be ecologically sustainable, as well as the relative cost of mitigation alternatives" (Federal Register 1995).

Agencies may take the approach of prioritizing wetland functions within a candidate trading area to simplify the process of bank functional design. This can be a valuable tool for ordering the process, but it also introduces the risk of losing sight of all but the highest-priority functions.

Long-Term Responsibility:

The difficulties involved in creating bank wetlands in advance also highlight the importance of establishing responsibility in the event of bank failure or bank wetland establishment in a functional form other than that agreed upon. If bank credits have been sold and development impacts incurred, a failed bank effort means that the functions of the original natural wetland have been completely lost from the watershed. Examples of failed mitigation banking efforts already exist. Although all credits had been sold, the Northlakes Park Bank in Hillsborough County,

Florida, did not achieve the water levels anticipated in the restoration wetland and was subsequently "abandoned" (Salveson 1995). Similarly, the Mud Lake Bank in Jefferson County, Idaho required enough water to maintain the hydroperiod for the 150-acre site. This could not be achieved because local agriculture and development projects utilized most of the available water. The importance of clarifying responsibility up front is becoming increasingly clear from banking attempts such as these. The permitting process should require remedial plans in the event of poor bank establishment, and contingency plans in the event of bank failure, along with long-term commitments to bank establishment and protection by the appropriate parties. Another means of gaining greater assurance of responsibility for bank success is the use of **performance bonds**. Regulatory agencies have started **requiring performance bonds**, based on bank acreage, to guarantee wetland performance for at least 5 years after the last credit is sold (Salveson 1995). The recent federal guidance stresses the importance of adopting an enforceable mechanism establishing responsibility of the bank sponsor to develop and operate the bank properly, and the importance of requiring adequate financial assurances based on the risk of bank failure (Federal Register 1995).

The Role of Mitigation Banks

The most suitable role for wetland banking has been a subject of some discussion, and the issue of whether agencies should limit the application of banks to certain types of impacts has been debated. While the speculative, commercial side of banking has been contentious, it appears that banking can be especially useful for projects where individual losses are relatively small (but collectively significant) and cannot be fully mitigated on or immediately adjacent to, the project site (Short 1988). For example, banks offer a viable alternative to the piece-by-piece mitigation needs incurred by parties seeking to widen or locate new linear facilities, such as roadways, power corridors, and other utility easements. Banking allows these applicants to conduct prior planning and to acquire property in well-suited locations, as opposed to shoehorning mitigation sites piecemeal into existing holdings, often within rights-of-way or roadway stormwater ponds.

Banking can also be more efficient in terms of the permitting process. It can be negotiated one time, up front, providing greater predictability and simplicity to the mitigation aspect of subsequent individual permit applications. This is especially attractive for government agencies seeking permits, such as

transportation agencies and county road departments, that must adhere to strict budget time frames and constraints and that cannot afford uncertainties often associated with wetland mitigation permitting. Permitting agencies also benefit from more efficient use of review time.

Economies of scale can be obtained in design, construction, monitoring, and long-term protection of banks. Banking allows the design of one mitigation site instead of many. Similar economies occur with construction costs at only one site at one time, as opposed to at numerous small sites spread out over time and space, especially since a significant part of such costs is associated with mobilization of equipment. Substantial economies of scale can occur associated with longer-term monitoring and maintenance of a single constructed wetland as opposed to many and with remedial actions that may be needed. These economies apply to agency compliance monitoring as well as to the permittee's monitoring and reporting requirements.

The consolidation of resources associated with economies of scale allows for a better quality of work in all aspects of bank development compared to numerous small mitigation sites. For example, a more thorough evaluation of bank site features, such as hydrology, can be conducted with the same amount of resources as needed for separate sites. This focusing of resources increases the chances of bank success.

As mentioned in the introduction, properly conducted banking eliminates the temporal loss of wetland functions that occurs with normal permitting procedures. It also eliminates the uncertainty that normally occurs over whether mitigation will be successful. Even bank wetlands that have obtained only partial functions at the time of credit withdrawal provide partial offsetting of temporal loss of functions and partial elimination of uncertainty.

One philosophical concern of banking opponents has been that the use of banks may remove some of the caution with which applicants would otherwise consider proposing impacts, as well as some of the rigor with which agencies evaluate the mandatory applicant efforts to avoid and minimize impacts to wetlands in project design. In light of the variable success record of wetland mitigation to date, incentives to relax the emphasis on avoidance and minimization of impacts is of concern to some observers. However, the newly released federal guidelines make clear that the normal review process changes in no way for

applicants proposing to draw on a mitigation bank (Federal Register 1995).

Perhaps the most promising use of mitigation banking is in the realm of watershed and wildlife corridor planning and protection. Here, innovative uses of banking offer the potential to complement landscape-scale environmental protection and restoration efforts. Local government planners are beginning to consider using mitigation banking as a way of increasing their ability to successfully establish greenways and wildlife corridors. The opportunity also exists to direct wetland banking efforts strategically within the watershed to benefit identified water quality needs at this scale. Banking in this context is being expanded to include not only wetland creation, but also restoration of degraded wetlands, re-establishment of native upland communities in association with wetlands, and placement of long-term protective restrictions on use of these areas.

**V. Federal Guidelines for the Establishment, Use and
Operation of Mitigation Banks**

DEPARTMENT OF DEFENSE
Department of the Army, Corps of Engineers
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service
DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

Federal Guidance for the Establishment, Use and Operation of Mitigation Banks

AGENCIES: Corps of Engineers, Department of Army, DOD; Environmental Protection Agency; Natural Resources Conservation Service, Agriculture; Fish and Wildlife Service, Interior; and National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Commerce.

ACTION: Notice

SUMMARY: The Army Corps of Engineers (Corps), Environmental Protection Agency (EPA), National Resources Conservation Service (NRCS), Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) are issuing final policy guidance regarding the establishment, use and operation of mitigation banks for the purpose of providing compensation for adverse impacts to wetlands and other aquatic resources. The purpose of this guidance is to clarify the manner in which mitigation banks may be used to satisfy mitigation requirements of the Clean Water Act (CWA) Section 404 permit program and the wetland conservation provisions of the Food Security Act (FSA) (i.e., "Swampbuster" provisions). Recognizing the potential benefits mitigation banking offers for streamlining the permit evaluation process and providing more effective mitigation for authorized impacts to wetlands, the agencies encourage the establishment and appropriate use of mitigation banks in the Section 404 and "Swampbuster" programs.

DATES: The effective date of this Memorandum to the Field is December 28, 1995.

FOR FURTHER INFORMATION CONTACT: Mr. Jack Chowning (Corps) at (202) 761-[[Page 58606]] 1781; Mr. Thomas Kelsch (EPA) at (202) 260-8795; Ms. Sandra Byrd (NRCS) at (202) 690-3501; Mr. Mark Miller (FWS) at (703) 358-2183; Ms. Susan-Marie Stedman (NMFS) at (301) 713-2325.

SUPPLEMENTARY INFORMATION: Mitigating the environmental impacts of necessary development actions on the Nation's wetlands and other aquatic resources is a central premise of Federal wetlands programs. The CWA Section 404 permit program relies on the use of compensatory mitigation to offset unavoidable damage to wetlands and other aquatic resources through, for example, the restoration or creation of wetlands. Under the "Swampbuster" provisions of the FSA, farmers are required to provide mitigation to offset certain conversions of wetlands for agricultural purposes in order to maintain their program eligibility.

Mitigation banking has been defined as wetland restoration, creation, enhancement, and in exceptional circumstances, preservation undertaken expressly for the purpose of compensating for unavoidable wetland losses in advance of development actions, when such compensation cannot be achieved at the

development site or would not be as environmentally beneficial. It typically involves the consolidation of small, fragmented wetland mitigation projects into one large contiguous site. Units of restored, created, enhanced or preserved wetlands are expressed as "credits" which may subsequently be withdrawn to offset "debits" incurred at a project development site.

Ideally, mitigation banks are constructed and functioning in advance of development impacts, and are seen as a way of reducing uncertainty in the CWA Section 404 permit program or the FSA "Swampbuster" program by having established compensatory mitigation credit available to an applicant. By consolidating compensation requirements, banks can more effectively replace lost wetland functions within a watershed, as well as provide economies of scale relating to the planning, implementation, monitoring and management of mitigation projects.

On August 23, 1993, the Clinton Administration released a comprehensive package of improvements to Federal wetlands programs which included support for the use of mitigation banks. At that same time, EPA and the Department of the Army issued interim guidance clarifying the role of mitigation banks in the Section 404 permit program and providing general guidelines for their establishment and use. In that document it was acknowledged that additional guidance would be developed, as necessary, following completion of the first phase of the Corps Institute for Water Resources national study on mitigation banking.

The Corps, EPA, NRCS, FWS and NMFS provided notice [60 FR 12286; March 6, 1995] of a proposed guidance on the policy of the Federal government regarding the establishment, use and operation of mitigation banks. The proposed guidance was based, in part, on the experiences to date with mitigation banking, as well as other environmental, economic and institutional issues identified through the Corps national study. Over 130 comments were received on the proposed guidance. The final guidance is based on full and thorough consideration of the public comments received.

A majority of the letters received supported the proposed guidance in general, but suggested modifications to one or more parts of the proposal. In response to these comments, several changes have been made to further clarify the provisions and make other modifications, as necessary, to ensure effective establishment and use of mitigation banks. One key issue on which the agencies received numerous comments focused on the timing of credit withdrawal. In order to provide additional clarification of the changes made to the final guidance in response to comments, the agencies wish to emphasize that it is our intent to ensure that decisions to allow credits to be withdrawn from a mitigation bank in advance of bank maturity be made on a case-by-case basis to best reflect the particular ecological and economic circumstances of each bank. The percentage of advance credits permitted for a particular bank may be higher or lower than the 15 percent example included in the proposed guidance. The final guidance is being revised to eliminate the reference to a specific percentage in order to provide needed flexibility. Copies of the comments and the agencies' response to significant comments are available for public review. Interested parties should contact the agency representatives for additional information.

This guidance does not change the substantive requirements of the Section 404 permit program or the FSA "Swampbuster" program. Rather, it interprets and provides internal guidance and procedures to the agency field personnel for the establishment, use and operation of mitigation banks consistent with existing regulations and policies of each program. The policies set out in this document are not final agency action, but are intended solely as guidance. The guidance is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States. The guidance does not establish or affect legal rights or obligations, establish a binding norm on any party and it is not finally determinative of the issues addressed. Any regulatory decisions made by the agencies in any particular matter addressed by this guidance will be made by applying the governing law and regulations to the relevant facts. The purpose of

the document is to provide policy and technical guidance to encourage the effective use of mitigation banks as a means of compensating for the authorized loss of wetlands and other aquatic resources.

John H. Zirschky, *Acting Assistant Secretary (Civil Works), Department of the Army.*

Robert Perciasepe, *Assistant Administrator for Water, Environmental Protection Agency.*

James R. Lyons, *Assistant Secretary, Natural Resources and Environment, Department of Agriculture.*

George T. Frampton, Jr., *Assistant Secretary for Fish and Wildlife and Parks, Department of the Interior.*

Douglas K. Hall, *Assistant Secretary for Oceans and Atmosphere, Department of Commerce.*

MEMORANDUM TO THE FIELD

SUBJECT: Federal Guidance for the Establishment, Use and Operation of Mitigation Banks

I. Introduction

A. Purpose and Scope of Guidance

This document provides policy guidance for the establishment, use and operation of mitigation banks for the purpose of providing compensatory mitigation for authorized adverse impacts to wetlands and other aquatic resources. This guidance is provided expressly to assist Federal personnel, bank sponsors, and others in meeting the requirements of Section 404 of the Clean Water Act (CWA), Section 10 of the Rivers and Harbors Act, the wetland conservation provisions of the Food Security Act (FS) (i.e., "Swampbuster"), and other applicable Federal statutes and regulations. The policies and procedures discussed herein are consistent with current requirements of the Section 10/404 regulatory program and "Swampbuster" provisions and are intended only to clarify the applicability of existing requirements to mitigation banking. [[Page 58607]]

The policies and procedures discussed herein are applicable to the establishment, use and operation of public mitigation banks, as well as privately-sponsored mitigation banks, including third party banks (e.g., entrepreneurial banks).

B. Background

For purposes of this guidance, mitigation banking means the restoration, creation, enhancement and, in exceptional circumstances, preservation of wetlands and/or other aquatic resources expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources.

The objective of a mitigation bank is to provide for the replacement of the chemical, physical and biological functions of wetlands and other aquatic resources which are lost as a result of authorized impacts. Using appropriate methods, the newly established functions are quantified as mitigation "credits" which are available for use by the bank sponsor or by other parties to compensate for adverse impacts (i.e., "debits"). Consistent with mitigation policies established under the Council on Environmental Quality Implementing Regulations (CEQ regulations) (40 CFR Part 1508.20), and the Section 404(b)(1) Guidelines (Guidelines) (40 CFR Part 230), the use of credits may only be authorized for purposes of complying with Section 10/404 when adverse impacts are unavoidable. In addition, for both the Section 10/404 and "Swampbuster" programs, credits may only be authorized when on-site compensation is either not practicable or use of a

mitigation bank is environmentally preferable to on-site compensation. Prospective bank sponsors should not construe or anticipate participation in the establishment of a mitigation bank as ultimate authorization for specific projects, as excepting such projects from any applicable requirements, or as preauthorizing the use of credits from that bank for any particular project.

Mitigation banks provide greater flexibility to applicants needing to comply with mitigation requirements and can have several advantages over individual mitigation projects, some of which are listed below:

1. It may be more advantageous for maintaining the integrity of the aquatic ecosystem to consolidate compensatory mitigation into a single large parcel or contiguous parcels when ecologically appropriate;
2. Establishment of a mitigation bank can bring together financial resources, planning and scientific expertise not practicable to many project-specific compensatory mitigation proposals. This consolidation of resources can increase the potential for the establishment and long-term management of successful mitigation that maximizes opportunities for contributing to biodiversity and/or watershed function;
3. Use of mitigation banks may reduce permit processing times and provide more cost-effective compensatory mitigation opportunities for projects that qualify;
4. Compensatory mitigation is typically implemented and functioning in advance of project impacts, thereby reducing temporal losses of aquatic functions and uncertainty over whether the mitigation will be successful in offsetting project impacts;
5. Consolidation of compensatory mitigation within a mitigation bank increases the efficiency of limited agency resources in the review and compliance monitoring of mitigation projects, and thus improves the reliability of efforts to restore, create or enhance wetlands for mitigation purposes.
6. The existence of mitigation banks can contribute towards attainment of the goal for no overall net loss of the Nation's wetlands by providing opportunities to compensate for authorized impacts when mitigation might not otherwise be appropriate or practicable.

II. POLICY CONSIDERATIONS

The following policy considerations provide general guidance for the establishment, use and operation of mitigation banks. It is the agencies' intent that this guidance be applied to mitigation bank proposals submitted for approval on or after the effective date of this guidance and to those in early stages of planning or development. It is not intended that this policy be retroactive for mitigation banks that have already received agency approval. While it is recognized that individual mitigation banking proposals may vary, it is the intent of this guidance that the fundamental precepts be applicable to future mitigation banks.

For the purposes of Section 10/104, and consistent with the CEQ regulations, the Guidelines, and the Memorandum of Agreement Between the Environmental Protection Agency (EPA) and the Department of the Army Concerning the Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines, mitigation means sequentially avoiding impacts, minimizing impacts, and compensating for remaining unavoidable impacts. Compensatory mitigation, under Section 10/404, is the restoration, creation, enhancement, or in exceptional circumstances, preservation of wetlands and/or other aquatic resources for the purpose of compensating for unavoidable adverse impacts. A site where wetlands and/or other aquatic resources are restored, created, enhanced, or in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources is a mitigation bank.

A. Authorities

This guidance is established in accordance with the following statutes, regulations, and policies. It is intended to clarify provisions within these existing authorities and does to establish any new requirements.

1. Clean Water Act Section 404 (33 U.S.C. 1344).
2. Rivers and Harbors Act of 1899 Section 10 (33 U.S.C. 403 et seq.)
3. Environmental Protection Agency, Section 404(b)(1) Guidelines (40 CFR Part 230). Guidelines for Specification of Disposal Sites for Dredged or Fill Material.
4. Department of the Army, Section 404 Permit Regulations (33 CFR Parts 320-330). Policies for evaluating permit applications to discharge dredged or fill material.
5. Memorandum of Agreement between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines (February 6, 1990).
6. Title XII Food Security Act of 1985 as amended by the Food, Agriculture, Conservation and Trade Act of 1990 (16 U.S.C. 3801 et seq.).
7. National Environmental Policy Act (42 U.S.C. 4321 et seq.), including the Council on Environmental Quality's implementing regulations (40 CFR Parts 1500-1508).
8. Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.).
9. Fish and Wildlife Service Mitigation Policy (46 FR pages 7644-7663, 1981).
10. Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.).
11. National Marine Fisheries Service Habitat Conservation Policy (48 FR pages 53142-53147, 1983).

The policies set out in this document are not final agency action, but are intended solely as guidance. The guidance is not intended, nor can it be relied upon, to create any rights **[[Page 58608]]** enforceable by any party in litigation with the United States. This guidance does not establish or affect legal rights or obligations, establish a binding norm on any party and it is not finally determinative of the issues addressed. Any regulatory decisions made by the agencies in any particular matter addressed by this guidance will be made by applying the governing law and regulations to the relevant facts.

B. Planning Considerations

1. Goal Setting.

The overall goal of a mitigation bank is to provide economically efficient and flexible mitigation opportunities, while fully compensating for wetland and other aquatic resource losses in a manner that contributes to the long-term ecological functioning of the watershed within which the bank is to be located. The goal will include the need to replace essential aquatic functions which are anticipated to be lost through authorized activities within the bank's service area. In some cases, banks may also be used to address other resource objectives that have been identified in a watershed management plan or other resource assessment. It is desirable to set the particular objectives for a mitigation bank (i.e., the type and character of wetlands and/or aquatic resources to be established) in advance of site selection. The goal and objectives should be driven by the anticipated mitigation need; the site selected should support achieving the goal and objectives.

2. Site Selection.

The agencies will give careful consideration to the ecological suitability of a site for achieving the goal and objectives of a bank, i.e., that it possess the physical, chemical and biological characteristics to support establishment of the desired aquatic resources and functions. Size and location of the site relative to other ecological features, hydrologic sources (including the availability of water rights), and compatibility with adjacent land uses and watershed management plans are important factors for consideration. It also is important that ecologically significant aquatic or upland resources (e.g., shallow sub-tidal habitat, mature forests), cultural sites, or habitat for Federally or State-listed threatened and endangered species are not compromised in the process of establishing a bank. Other significant factors for consideration include, but are not limited to, development trends (i.e., anticipated land use changes), habitat status and trends, local or regional goals for the restoration or protection of particular habitat types or functions (e.g., re-establishment of habitat corridors or habitat for species of concern), water quality and floodplain management goals, and the relative potential for chemical contamination of the wetlands and/or other aquatic resources.

Banks may be sited on public or private lands. Cooperative arrangements between public and private entities to use public lands for mitigation banks may be acceptable. In some circumstances, it may be appropriate to site banks on Federal, state, tribal or locally-owned resource management areas (e.g., wildlife management areas, national or state forests, public parks, recreation areas). The siting of banks on such lands may be acceptable if the internal policies of the public agency allow use of its land for such purposes, and the public agency grants approval. Mitigation credits generated by banks of this nature should be based solely on those values in the bank that are supplemental to the public program(s) already planned or in place, that is, baseline values represented by existing or already planned public programs, including preservation value, should not be counted toward bank credits.

Similarly, Federally-funded wetland conservation projects undertaken via separate authority and for other purposes, such as the Wetlands Reserve Program, Farmer's Home Administration fee title transfers or conservation easements, and Partners for Wildlife Program, cannot be used for the purpose of generating credits within a mitigation bank. However, mitigation credit may be given for activities undertaken in conjunction with, but supplemental to, such programs in order to maximize the overall ecological benefit of the conservation project.

3. Technical Feasibility.

Mitigation banks should be planned and designed to be self-sustaining over time to the extent possible. The techniques for establishing wetlands and/or other aquatic resources must be carefully selected, since this science is constantly evolving. The restoration of historic or substantially-degraded wetlands and/or other aquatic resources (e.g., prior-converted cropland, farmed wetlands) utilizing proven techniques increases the likelihood of success and typically does not result in the loss of other valuable resources. Thus, restoration should be the first option considered when siting a bank. Because of the difficulty in establishing the correct hydrologic conditions associated with many creation projects and the tradeoff in wetland functions involved with certain enhancement activities, these methods should only be considered where there are adequate assurances to ensure success and that the project will result in an overall environmental benefit.

In general, banks which involve complex hydraulic engineering features and/or questionable water sources (e.g., pumped) are most costly to develop, operate and maintain, and have a higher risk of failure than banks designed to function with little or no human intervention. The former situations should only be

considered where there are adequate assurances to ensure success. This guidance recognizes that in some circumstances wetlands must be actively managed to ensure their viability and sustainability. Furthermore, long-term maintenance requirements may be necessary and appropriate in some cases (e.g., to maintain fire-dependent plant communities in the absence of natural fire; to control invasive exotic plant species).

Proposed mitigation techniques should be well-understood and reliable. When uncertainties surrounding the technical feasibility of a proposed mitigation technique exist, appropriate arrangements (e.g., financial assurances, contingency plans, additional monitoring requirements) should be in place to increase the likelihood of success. Such arrangements may be phased-out or reduced once the attainment of prescribed performance standards is demonstrated.

4. Role of Preservation.

Credit may be given when existing wetlands and/or other aquatic resources are preserved in conjunction with restoration, creation or enhancement activities, and when it is demonstrated that the preservation will augment the functions of the restored, created or enhanced aquatic resource. Such augmentation may be reflected in the total number of credits available from the bank.

In addition, the preservation of existing wetlands and/or other aquatic resources in perpetuity may be authorized as the sole basis for generating credits in mitigation banks only in exceptional circumstances, consistent with existing regulations, policies and guidance. Under such circumstances, preservation may be accomplished through the implementation of appropriate legal mechanisms (e.g., transfer of deed, deed restrictions, conservation easement) to protect wetlands and/or other aquatic resources, accompanied by **[[Page 58609]]** implementation of appropriate changes in land use or other physical changes as necessary (e.g., installation of restrictive fencing).

Determining whether preservation is appropriate as the sole basis for generating credits at a mitigation bank requires careful judgment regarding a number of factors. Consideration must be given to whether wetlands and/or other aquatic resources proposed for preservation (1) perform physical or biological functions, the preservation of which is important to the region in which the aquatic resources are located, and (2) are under demonstrable threat of loss or substantial degradation due to human activities that might not otherwise be expected to be restricted. The existence of a demonstrable threat will be based on clear evidence of destructive land use changes which are consistent with local and regional land use trends and are not the consequence of actions under the control of the bank sponsor. Wetlands and other aquatic resources restored under the Conservation Reserve Program or similar programs requiring only temporary conservation easements may be eligible for banking credit upon termination of the original easement if the wetlands are provided permanent protection and it would otherwise be expected that the resources would be converted upon termination of the easement. The number of mitigation credits available from a bank that is based solely on preservation should be based on the functions that would otherwise be lost or degraded if the aquatic resources were not preserved, and the timing of such loss or degradation. As such, compensation for aquatic resource impacts will typically require a greater number of acres from a preservation bank than from a bank which is based on restoration, creation or enhancement.

5. Inclusion of Upland Areas.

Credit may be given for the inclusion of upland areas occurring within a bank only to the degree that such features increase the overall ecological functioning of the bank. If such features are included as part of a bank, it is important that they receive the same protected status as the rest of the bank and be subject

to the same operational procedures and requirements. The presence of upland areas may increase the per-unit value of the aquatic habitat in the bank. Alternatively, limited credit may be given to upland areas protected within the bank to reflect the functions inherently provided by such areas (e.g., nutrient and sediment filtration of stormwater runoff, wildlife habitat diversity) which directly enhance or maintain the integrity of the aquatic ecosystem and that might otherwise be subject to threat of loss or degradation. An appropriate functional assessment methodology should be used to determine the manner and extent to which such features augment the functions of restored, created or enhanced wetlands and/or other aquatic resources.

6. Mitigation Banking and Watershed Planning.

Mitigation banks should be planned and developed to address the specific resource needs of a particular watershed. Furthermore, decisions regarding the location, type of wetlands and/or other aquatic resources to be established, and proposed uses of a mitigation bank are most appropriately made within the context of a comprehensive watershed plan. Such watershed planning efforts often identify categories of activities having minimal adverse effects on the aquatic ecosystem and that, therefore, could be authorized under a general permit. In order to reduce the potential cumulative effects of such activities, it may be appropriate to offset these types of impacts through the use of a mitigation bank established in conjunction with a watershed plan.

C. Establishment of Mitigation Banks

1. Prospectus

Prospective bank sponsors should first submit a prospectus to the Army Corps of Engineers (Corps) or Natural Resources Conservation Service (NRCS)¹ to initiate the planning and review process by the appropriate agencies. Prior to submitting a prospectus, bank sponsors are encouraged to discuss their proposal with the appropriate agencies (e.g., pre-application coordination).

It is the intent of the agencies to provide practical comments to the bank sponsors regarding the general need for and technical feasibility of proposed banks. Therefore, bank sponsors are encouraged to include in the prospectus sufficient information concerning the objectives for the bank and how it will be established and operated to allow the agencies to provide such feedback. Formal agency involvement and review is initiated with submittal of a prospectus.

2. Mitigation Banking Instruments

Information provided in the prospectus will serve as the basis for establishing the mitigation banking instrument. All mitigation banks need to have a banking instrument as documentation of agency concurrence on the objectives and administration of the bank. The banking instrument should describe in detail the physical and legal characteristics of the bank, and how the bank will be established and operated. For regional banking programs sponsored by a single entity (e.g., a state transportation agency), it may be appropriate to establish an "umbrella" instrument for the establishment and operation of multiple

¹ The Corps will typically serve as the lead agency for the establishment of mitigation banks. Bank sponsors proposing establishment of mitigation banks solely for the purpose of complying with the "Swampbuster" provisions of FSA should submit their prospectus to the NRCS.

bank sites. In such circumstances, the need for supplemental site-specific information (e.g., individual site plans) should be addressed in the banking instrument. The banking instrument will be signed by the bank sponsor and the concurring regulatory and resource agencies represented on the Mitigation Bank Review Team (section II.C.2). The following information should be addressed, as appropriate, within the banking instrument:

- a. Bank goals and objectives;
- b. Ownership of bank lands;
- c. Bank size and classes of wetlands and/or other aquatic resources proposed for inclusion in the bank, including a site plan and specifications;
- d. Description of baseline conditions at the bank site;
- e. Geographic service area;
- f. Wetland classes or other aquatic resource impacts suitable for compensation;
- g. Methods for determining credits and debits;
- h. accounting procedures;
- i. Performance standards for determining credit availability and bank success;
- j. Reporting protocols and monitoring plan;
- k. Contingency and remedial actions and responsibilities;
- l. Financial assurances;
- m. Compensation ratios;
- n. Provisions for long-term management and maintenance.

The terms and conditions of the banking instrument may be amended, in accordance with the procedures used to establish the instrument and subject to agreement by the signatories.

In cases where initial establishment of the mitigation bank involves a discharge into waters of the United States requiring Section 10/404 authorization, the banking instrument will be made part of a Department of the Army permit for that discharge. Submittal of an **[[Page 58610]]** individual permit application should be accompanied by a sufficiently-detailed prospectus to allow for concurrent processing of each. Preparation of a banking instrument, however, should not alter the normal permit evaluation process timeframes. A bank sponsor may proceed with activities for the construction of a bank subsequent to receiving the Department of the Army authorization. It should be noted, however, that a bank sponsor who proceeds in the absence of a banking instrument does so at his/her own risk.

In cases where the mitigation bank is established pursuant to the FSA, the banking instrument will be included in the plan developed or approved by NRCS and the Fish and Wildlife Service (FWS).

3. Agency Roles and Coordination

Collectively, the signatory agencies to the banking instrument will comprise the Mitigation Bank Review Team (MBRT). Representatives from the Corps, EPA, FWS, National Marine Fisheries Service (NMFS) and NRCS, as appropriate given the projected use for the bank, should typically comprise the MBRT. In addition, it is appropriate for representatives from state, tribal and local regulatory and resource agencies to participate where an agency has authorities and/or mandates directly affecting or affected by the establishment, use or operation of a bank. No agency is required to sign a banking instrument; however, in signing a banking instrument, an agency agrees to the terms of that instrument.

The Corps will serve as Chair of the MBRT, except in cases where the bank is proposed solely for the purpose of complying with the FSA, in which case NRCS will be the MBRT Chair. In addition, where a bank is proposed to satisfy the requirements of another Federal, state, tribal or local program, it may be appropriate for the administering agency to serve as co-Chair of the MBRT.

The primary role of the MBRT is to facilitate the establishment of mitigation banks through the development of mitigation banking instruments. Because of the different authorities and responsibilities of each agency represented on the MBRT, there is a benefit in achieving agreement on the banking instrument. For this reason, the MBRT will strive to obtain consensus on its actions. The Chair of the MBRT will have the responsibility for making final decisions regarding the terms and conditions of the banking instrument where consensus cannot otherwise be reached within a reasonable timeframe (e.g., 90 days from the date of submittal of a complete prospectus). The MBRT will review and seek consensus on the banking instrument and final plans for the restoration, creation, enhancement, and/or preservation of wetlands and other aquatic resources.

Consistent with its authorities under Section 10/404, the Corps is responsible for authorizing use of a particular mitigation bank on a project-specific basis and determining the number and availability of credits required to compensate for proposed impacts in accordance with the terms of the banking instrument. Decisions rendered by the Corps must fully consider review agency comments submitted as part of the permit evaluation process. Similarly, the NRCS, in consultation with the FWS, will make the final decision pertaining to the withdrawal of credits from banks as appropriate mitigation pursuant to FSA.

4. Role of the Bank Sponsor

The bank sponsor is responsible for the preparation of the banking instrument in consultation with the MBRT. The bank sponsor should, therefore, have sufficient opportunity to discuss the content of the banking instrument with the MBRT. The bank sponsor is also responsible for the overall operation and management of the bank in accordance with the terms of the banking instrument, including the preparation and distribution of monitoring reports and accounting statements/ledger, as necessary.

5. Public Review and Comment

The public should be notified of and have an opportunity to comment on all bank proposals. For banks which require authorization under an individual Section 10/404 permit or a state, tribal or local program that involves a similar public notice and comment process, this condition will typically be satisfied through such standard procedures. For other proposals, the Corps or NRCS, upon receipt of a complete banking prospectus, should provide notification of the availability of the prospectus for a minimum 21-day public comment period. Notification procedures will be similar to those used by the Corps in the standard permit review process. Copies of all public comments received will be distributed to the other members of the MBRT and the bank sponsor for full consideration in the development of the final banking instrument.

6. Dispute Resolution Procedure

The MBRT will work to reach consensus on its actions in accordance with this guidance. It is anticipated that all issues will be resolved by the MBRT in this manner.

a. Development of the Banking Instrument

During the development of the banking instrument, if any agency representative considers that a particular decision raises concern regarding the application of existing policy or procedures, an agency

may request, through written notification, that the issue be reviewed by the Corps District Engineer, or NRCS State Conservationist, as appropriate. Said notification will describe the issue in sufficient detail and provide recommendations for resolution. Within 20 days, the District Engineer or State Conservationist (as appropriate) will consult with the notifying agency(ies) and will resolve the issue. The resolution will be forwarded to the other MBRT member agencies. The bank sponsor may also request the District Engineer or State Conservationist review actions taken to develop the banking instrument if the sponsor believes that inadequate progress has been made on the instrument by the MBRT.

b. Application of the Banking Instrument

As previously stated, the Corps and NRCS are responsible for making final decisions on a project-specific basis regarding the use of a mitigation bank for purposes of Section 10/404 and FSA, respectively. In the event an agency on the MBRT is concerned that a proposed use may be inconsistent with the terms of the banking instrument, that agency may raise the issue to the attention of the Corps or NRCS through the permit evaluation process. In order to facilitate timely and effective consideration of agency comments, the Corps or NRCS, as appropriate, will advise the MBRT agencies of a proposed use of a bank. The Corps will fully consider comments provided by the review agencies regarding mitigation as part of the permit evaluation process. The NRCS will consult with FWA is making its decisions pertaining to mitigation.

If, in the view of an agency on the MBRT, an issued permit or series of permits reflects a pattern of concern regarding the application of the terms of the banking instrument, that agency may initiate review of the concern by the full MBRT through written notification to the MBRT Chair. The MBRT Chair will convene a meeting of the MBRT, or initiate another appropriate forum for communication, typically within 20 days of receipt of notification, to resolve concerns. Any such effort to address concerns [[Page 58611]] regarding the application of a banking instrument will not delay any decision pending before the authorizing agency (e.g., Corps or NRCS).

D. Criteria for Use of a Mitigation Bank

1. Project Applicability

All activities regulated under Section 10/404 may be eligible to use a mitigation bank as compensation for unavoidable impacts to wetlands and/or other aquatic resources. Mitigation banks established for FSA purposes may be debited only in accordance with the mitigation and replacement provisions of 7 CFR Part 12.

Credits from mitigation banks may also be used to compensate for environmental impacts authorized under other programs (e.g., state or local wetland regulatory programs, NPDES program, Corps civil works projects, Superfund removal and remedial actions). In no case may the same credits be used to compensate for more than one activity; however, the same credits may be used to compensate for an activity which requires authorization under more than one program.

2. Relationship to Mitigation Requirements

Under the existing requirements of Section 10/404, all appropriate and practicable steps must be undertaken by the applicant to first avoid and then minimize adverse impacts to aquatic resources, prior to authorization to use a particular mitigation bank. Remaining unavoidable impacts must be compensated to

the extent appropriate and practicable. For both the Section 10/404 and "Swampbuster" programs, requirements for compensatory mitigation may be satisfied through the use of mitigation banks when either on-site compensation is not practicable or use of the mitigation bank is environmentally preferable to on-site compensation.

It is important to emphasize that applicants should not expect that establishment of, or purchasing credits from, a mitigation bank will necessarily lead to a determination of compliance with applicable mitigation requirements (i.e., Section 404(b)(1) Guidelines or FSA Manual), or as excepting projects from any applicable requirements.

3. Geographic Limits of Applicability

The service area of a mitigation bank is the area (e.g., watershed, county) wherein a bank can reasonably be expected to provide appropriate compensation for impacts to wetlands and/or other aquatic resources. This area should be designated in the banking instrument. Designation of the service area should be based on consideration of hydrologic and biotic criteria, and be stipulated in the banking instrument. Use of a mitigation bank to compensate for impacts beyond the designated service area may be authorized, on a case-by-case basis, where it is determined to be practicable and environmentally desirable.

The geographic extent of a service area should, to the extent environmentally desirable, be guided by the cataloging unit of the "Hydrologic Unit map of the United States" (USGS, 1980) and the ecoregion of the "Ecoregions of the United States" (James M. Omernik, EPA, 1986) or section of the "Descriptions of the Ecoregions of the United States" (Robert G. Bailey, USDA, 1980). It may be appropriate to use other classification systems developed at the state or regional level for the purpose of specifying bank service areas, when such systems compare favorably in their objectives and level of detail. In the interest of the integrating banks with other resource management objectives, bank service areas may encompass larger watershed areas if the designation of such areas is supported by local or regional management plans (e.g., Special Area Management Plans, Advance Identification), State Wetland Conservation Plans or other Federally sponsored or recognized resource management plans. Furthermore, designation of a more inclusive service area may be appropriate for mitigation banks whose primary purpose is to compensate for linear projects that typically involve numerous small impacts in several different watersheds.

4. Use of a Mitigation Bank vs. On-Site Mitigation

The agencies' preference for on-site mitigation, indicated in the 1990 Memorandum of Agreement on mitigation between the EPA and the Department of the Army, should not preclude the use of a mitigation bank when there is no practicable opportunity for on-site compensation, or when use of a bank is environmentally preferable to on-site compensation. On-site mitigation may be preferable where there is a practicable opportunity to compensate for important local functions including local flood control functions, habitat for a species or population with a very limited geographic range or narrow environmental requirements, or where local water quality concerns dominate.

In choosing between on-site mitigation and use of a mitigation bank, careful consideration should be given to the likelihood for successfully establishing the desired habitat type, the compatibility of the mitigation project with adjacent land uses, and the practicability of long-term monitoring and maintenance to determine whether the effort will be ecologically sustainable, as well as the relative cost of mitigation alternatives. In general, use of a mitigation bank to compensate for minor aquatic resource impacts (e.g.,

numerous, small impacts associated with linear projects; impacts authorized under nationwide permits) is preferable to on-site mitigation. With respect to larger aquatic resource impacts, use of a bank may be appropriate if it is capable of replacing essential physical and/or biological functions of the aquatic resources which are expected to be lost or degraded. Finally, there may be circumstances warranting a combination of on-site and off-site mitigation to compensate for losses.

5. In-kind vs. Out-of-kind Mitigation Determinations

In the interest of achieving functional replacement, in-kind compensation of aquatic resource impacts should generally be required. Out-of-kind compensation may be acceptable if it is determined to be practicable and environmentally preferable to in-kind compensation (e.g., of greater ecological value to a particular region). However, non-tidal wetlands should typically not be used to compensate for the loss or degradation of tidal wetlands. Decisions regarding out-of-kind mitigation are typically made on a case-by-case basis during the permit evaluation process. The banking instrument may identify circumstances in which it is environmentally desirable to allow out-of-kind compensation within the context of a particular mitigation bank (e.g., for banks restoring a complex of associated wetland types). Mitigation banks developed as part of an area-wide management plan to address a specific resource objective (e.g., restoration of a particularly vulnerable or valuable wetland habitat type) may be such an example.

6. Timing of Credit Withdrawal

The number of credits available for withdrawal (i.e., debiting) should generally be commensurate with the level of aquatic functions attained at a bank at the time of debiting. The level of function may be determined through the application of performance standards tailored to the specific restoration, creation or enhancement activity at the bank site or through the use of an appropriate functional assessment methodology. [[Page 58612]]

The success of a mitigation bank with regard to its capacity to establish a healthy and fully functional aquatic system relates directly to both the ecological and financial stability of the bank. Since financial considerations are particularly critical in early stages of bank development, it is generally appropriate, in cases where there is adequate financial assurance and where the likelihood of the success of the bank is high, to allow limited debiting of a percentage of the total credits projected for the bank at maturity. Such determinations should take into consideration the initial capital costs needed to establish the bank, and the likelihood of its success. However, it is the intent of this policy to ensure that those actions necessary for the long-term viability of a mitigation bank be accomplished prior to any debiting of the bank. In this regard, the following minimum requirements should be satisfied prior to debiting: (1) banking instrument and mitigation plans have been approved; (2) bank site has been secured; and (3) appropriate financial assurances have been established. In addition, initial physical and biological improvements should be completed no later than the first full growing season following initial debiting of a bank. The temporal loss of functions associated with the debiting of projected credits may justify the need for requiring higher compensation ratios in such cases. For mitigation banks which propose multiple-phased construction, similar conditions should be established for each phase.

Credits attributed to the preservation of existing aquatic resources may become available for debiting immediately upon implementation of appropriate legal protection accompanied by appropriate changes in land use or other physical changes, as necessary.

7. Crediting/Debiting/Accounting Procedures

Credits and debits are the terms used to designate the units of trade (i.e., currency) in mitigation banking. Credits represent the accrual or attainment of aquatic functions at a bank; debits represent the loss of aquatic functions at an impact or project site. Credits are debited from a bank when they are used to offset aquatic resource impacts (e.g., for the purpose of satisfying Section 10/404 permit or FSA requirements).

An appropriate functional assessment methodology (e.g., Habitat Evaluation Procedures, hydrogeomorphic approach to wetlands functional assessment, other regional assessment methodology) acceptable to all signatories should be used to assess wetland and/or other aquatic resource restoration, creation and enhancement activities within a mitigation bank, and to quantify the amount of available credits. The range of functions to be assessed will depend upon the assessment methodology identified in the banking instrument. The same methodology should be used to assess both credits and debits. If an appropriate functional assessment methodology is impractical to employ, acreage may be used as a surrogate for measuring function. Regardless of the method employed, the number of credits should reflect the difference between site conditions under the with-and without-bank scenarios.

The bank sponsor should be responsible for assessing the development of the bank and submitting appropriate documentation of such assessments to the authorizing agency(ies), who will distribute the documents to the other members of the MBRT for review. Members of the MBRT are encouraged to conduct regular (e.g., annual) on-site inspections, as appropriate, to monitor bank performance. Alternatively, functional assessments may be conducted by a team representing involved resources and regularly agencies and other appropriate parties. The number of available credits in a mitigation bank may need to be adjusted to reflect actual conditions.

The banking instrument should require that bank sponsors establish and maintain an accounting system (i.e., ledger) which documents the activity of all mitigation bank accounts. Each time an approved debit/credit transaction occurs at a given bank, the bank sponsor should submit a statement to the authorizing agency(ies). The bank sponsor should also generate an annual ledger report for all mitigation bank accounts to be submitted to the MBRT Chair for distribution to each member of the MBRT.

Credits may be sold to third parties. The cost of mitigation credits to a third party is determined by the bank sponsor.

8. Party Responsible for Bank Success

The bank sponsor is responsible for assuring the success of the debited restoration, creation, enhancement and preservation activities at the mitigation bank, and it is therefore extremely important that an enforceable mechanism be adopted establishing the responsibility of the bank sponsor to develop and operate the bank properly. Where authorization under Section 10/404 and/or FSA is necessary to establish the bank, the Department of the Army permit or NRCS plan should be conditioned to ensure that provisions of the banking instrument are enforceable by the appropriate agency(ies). In circumstances where establishment of a bank does not require such authorization, the details of the bank sponsor's responsibilities should be delineated by the relevant authorizing agency (e.g., the Corps in the case of Section 10/404 permits) in any permit in which the permittee's mitigation obligations are met through use of the bank. In addition, the bank sponsor should sign such permits for the limited purpose of meeting those mitigation responsibilities, thus confirming that those responsibilities are enforceable against the bank sponsor if necessary.

E. Long-Term Management, Monitoring and Remediation

1. Bank Operational Life

The operational life of a bank refers to the period during which the terms and conditions of the banking instrument are in effect. With the exception of arrangements for the long-term management and protection in perpetuity of the wetlands and/or other aquatic resources, the operational life of a mitigation bank terminates at the point when (1) Compensatory mitigation credits have been exhausted or banking activity is voluntarily terminated with written notice by the bank sponsor provided to the Corps or NRCS and other members of the MBRT, and (2) it has been determined that the debited bank is functionally mature and/or self-sustaining to the degree specified in the banking instrument.

2. Long-term Management and Protection

The wetlands and/or other aquatic resources in a mitigation bank should be protected in perpetuity with appropriate real estate arrangements (e.g., conservation easements, transfer of title to Federal or State resource agency or non-profit conservation organization). Such arrangements should effectively restrict harmful activities (i.e., incompatible uses²) that might otherwise jeopardize the purpose of the bank. In exceptional circumstances, real estate arrangements may be approved which dictate finite protection for a bank (e.g., for coastal protection projects which prolong the ecological viability of [[Page 58613]] the aquatic system). However, in no case should finite protection extend for a lesser time than the duration of project impacts for which the bank is being used to provide compensation.

The bank sponsor is responsible for securing adequate funds for the operation and maintenance of the bank during its operational life, as well as for the long-term management of the wetlands and/or other aquatic resources, as necessary. The banking instrument should identify the entity responsible for the ownership and long-term management of the wetlands and/or other aquatic resources. Where needed, the acquisition and protection of water rights should be secured by the bank sponsor and documented in the banking instrument.

3. Monitoring Requirements

The bank sponsor is responsible for monitoring the mitigation bank in accordance with monitoring provisions identified in the banking instrument to determine the level of success and identify problems requiring remedial action. Monitoring provisions should be set forth in the banking instrument and based on scientifically sound performance standards prescribed for the bank. Monitoring should be conducted at time intervals appropriate for the particular project type and until such time that the authorizing agency(ies), in consultation with the MBRT, are confident that success is being achieved (i.e., performance standards are attained). The period for monitoring will typically be five years; however, it may be necessary to extend this period for projects requiring more time to reach a stable condition (e.g., forested wetlands) or where remedial activities were undertaken. Annual monitoring reports should be submitted to the authorizing agency(ies), who is responsible for distribution to the other members of the MBRT, in accordance with the terms specified in the banking instrument.

² For example, certain silvicultural practices (e.g. clear cutting and/or harvests on short-term rotations) may be incompatible with the objectives of a mitigation bank. In contrast, silvicultural practices such as long-term rotations, selective cutting, maintenance of vegetation diversity, and undisturbed buffers are more likely to be considered a compatible use.

4. Remedial Action

The banking instrument should stipulate the general procedures for identifying and implementing remedial measures at a bank, or any portion thereof. Remedial measures should be based on information contained in the monitoring reports (i.e., the attainment of prescribed performance standards), as well as agency site inspections. The need for remediation will be determined by the authorizing agency(ies) in consultation with the MBRT and bank sponsor.

5. Financial Assurances

The bank sponsor is responsible for securing sufficient funds or other financial assurances to cover contingency actions in the event of bank default or failure. Accordingly, banks posing a greater risk of failure and where credits have been debited, should have comparatively higher financial sureties in place, than those where the likelihood of success is more certain. In addition, the bank sponsor is responsible for securing adequate funding to monitor and maintain the bank throughout its operational life, as well as beyond the operational life if not self-sustaining. Total funding requirements should reflect realistic cost estimates for monitoring, long-term maintenance, contingency and remedial actions.

Financial assurances may be in the form of performance bonds, irrevocable trusts, escrow accounts, casualty insurance, letters of credit, legislatively-enacted dedicated funds for government operate banks or other approved instruments. Such assurances may be phased-out or reduced, once it has been demonstrated that the bank is functionally mature and/or self-sustaining (in accordance with performance standards).

F. Other Considerations

1. In-lieu-fee Mitigation Arrangements.

For purposes of this guidance, in-lieu-fee, fee mitigation, or other similar arrangements, wherein funds are paid to a natural resource management entity for implementation of either specific or general wetland or other aquatic resource development projects, are not considered to meet the definition of mitigation banking because they do not typically provide compensatory mitigation in advance of project impacts. Moreover, such arrangements do not typically provide a clear timetable for the initiation of mitigation efforts. The Corps, in consultation with the other agencies, may find there are circumstances where such arrangements are appropriate so long as they meet the requirements that would otherwise apply to an offsite, prospective mitigation effort and provides adequate assurances of success and timely implementation. In such cases, a formal agreement between the sponsor and the agencies, similar to a banking instrument, is necessary to define the conditions under which its use is considered appropriate.

2. Special Considerations for "Swampbuster"

Current FSA legislation limits the extent to which mitigation banking can be used for FSA purposes. Therefore, if a mitigation bank is to be used for FSA purposes, it must meet the requirements of FSA.

III. DEFINITIONS

For the purposes of this guidance document the following terms are defined:

A. *Authorizing agency.* Any Federal, state, tribal or local agency that has authorized a particular use of a mitigation bank as compensation for an authorized activity; the authorizing agency will typically have the enforcement authority to ensure that the terms and conditions of the banking instrument are satisfied.

B. *Bank sponsor.* Any public or private entity responsible for establishing and, in most circumstances, operating a mitigation bank.

C. *Compensatory mitigation.* For purposes of Section 10/404, compensatory mitigation is the restoration, creation, enhancement, or in exceptional circumstances, preservation of wetlands and/or other aquatic resources for the purpose of compensating for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

D. *Consensus.* The term consensus, as defined herein, is a process by which a group synthesizes its concerns and ideas to form a common collaborative agreement acceptable to all members. While the primary goal of consensus is to reach agreement on an issue by all parties, unanimity may not always be possible.

E. *Creation.* The establishment of a wetland or other aquatic resource where one did not formerly exist.

F. *Credit.* A unit of measure representing the accrual or attainment of aquatic functions at a mitigation bank; the measure of function is typically indexed to the number of wetland acres restored, created, enhanced or preserved.

G. *Debit.* A unit of measure representing the loss of aquatic functions at an impact or project site.

H. *Enhancement.* Activities conducted in existing wetlands or other aquatic resources which increase one or more aquatic functions.

I. *Mitigation.* For purposes of Section 10/404 and consistent with the Council on Environmental Quality regulations, the Section 404(b)(1) Guidelines and the Memorandum of Agreement Between [[Page 58614]] the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines, mitigation means sequentially avoiding impacts, minimizing impacts, and compensating for remaining unavoidable impacts.

J. *Mitigation bank.* A mitigation bank is a site where wetlands and/or other aquatic resources are restored, created, enhanced, or in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources. For purposes of Section 10/404, use of a mitigation bank may only be authorized when impacts are unavoidable.

K. *Mitigation Bank Review Team (MBRT).* An interagency group of Federal, state, tribal and/or local regulatory and resource agency representatives which are signatory to a banking instrument and oversee the establishment, use and operation of a mitigation bank.

L. *Practicable.* Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

M. *Preservation.* The protection of ecologically important wetlands or other aquatic resources in perpetuity through the implementation of appropriate legal and physical mechanisms. Preservation may include protection of upland areas adjacent to wetlands as necessary to ensure protection and/or enhancement of the aquatic ecosystem.

N. *Restoration.* Re-establishment of wetland and/or other aquatic resource characteristics and function(s) at a site where they have ceased to exist, or exist in a substantially degraded state.

O. *Service area.* The service area of a mitigation bank is the designated area (e.g., watershed, county) wherein a bank can reasonably be expected to provide appropriate compensation for impacts to wetlands

**SUBJECT: Federal Guidance for the Establishment, Use and Operation of Mitigation Banks [Federal Register:
28 Nov 95 (Vol. 60, No. 228, pp. 58605-58614)]**

and/or other aquatic resources.

John H. Zirschky, *Acting Assistant Secretary (Civil Works), Department of the Army.*

Robert Perciasepe, *Assistant Administrator for Water, Environmental Protection Agency.*

Thomas R. Hebert, *Acting Undersecretary for Natural Resources and Environment, Department of
Agriculture.*

Robert P. Davison, *Acting Assistant Secretary for Fish and Wildlife and Parks, Department of the
Interior.*

Douglas K. Hall, *Assistant Secretary for Oceans and Atmosphere, Department of Commerce.*

[FR Doc. 95-28907 Filed 11-27-95; 8:45 am]

BILLING CODE 3710-92-M

VI. Prospectus Checklist

Prospectus Checklist

The Mitigation Bank Prospectus (Prospectus) is intended to be used at the pre-application coordination phase of the joint state/federal Mitigation Bank Review Team (MBRT) process to facilitate the exchange of information between prospective mitigation bankers and regulatory agency staff. The goal of the Prospectus is to maximize the effectiveness of the pre-application meeting for all attendees.

1. Aerial photography of the project site (historic and current use).
2. A preliminary wetland delineation (i.e. soil maps, NWI, U.S.G.S. quad, etc.)
3. Narrative overview of the project describing how the resulting increase in ecological value at the site will improve conditions in the regional watershed (or proposed mitigation service area).
4. Types of mitigation proposed: Restoration, Enhancement, and/or Preservation.
5. Estimated acreage of each type of work: Restoration, Enhancement, and/or Preservation.
6. Describe how the mitigation will be accomplished.
e.g. Hydrologic restoration via filling ditch network,
Re-establishment of fire regime,
Re-establishment of native vegetative communities via (name activity proposed),
Other.
7. Existing vegetative community types and target native community types.
8. A discussion of the current ecological conditions, the proposed ecological conditions under the with- and without-bank scenarios (functional lift), and how the difference between these will be quantified. Relevant to this discussion are the presence of special biological resources (e.g. endangered species/critical habitat, special aquatic sites, etc.) and adjacent land uses.
9. Address if the bank may affect or be affected by a public project. If so, discuss the bank's compatibility with the public project.
10. A preliminary discussion of any existing or potential historic or archaeological resources on the site.

11. A discussion of what interest in the property is currently held and will be maintained (e.g., fee simple ownership, lease or use agreement, easements: road, powerline or other types of easements, floodways, mineral rights, etc.); identify any portion of the bank that would occur on public lands; identify the owner of that land or holder of any easements on the property.
12. The proposed Mitigation Service Area and rational.
13. Identify the anticipated customers.
14. Anticipated schedule for completion of the bank.
15. Plans for perpetual maintenance and management of the bank, identifying the responsible party.
16. A discussion of current land use at the bank site and surrounding areas. Discuss reasonable expected development for the site (if bank activities were not implemented) and the surrounding area.

VII. Mitigation Bank Agreement (Instrument) Template

MITIGATION BANK AGREEMENT
NAME Bank

COUNTY/PARISH, STATE

Prepared for:

U. S. Army Corps of Engineers, Vicksburg District
U. S. Environmental Protection Agency, Region ____
U. S. Fish and Wildlife Service, _____ Office
STATE Department of Wildlife, Fisheries & Parks
STATE Department of Environmental Quality

Prepared by:

DATE

This Mitigation Bank Agreement regarding the establishment, use, operation, and maintenance of the Mitigation Bank (hereinafter, the Mitigation Bank) is made and entered into by . (Hereinafter, the Sponsor), the U. S. Army Corps of Engineers, Vicksburg District (CORPS - Vicksburg), the U. S. Environmental Protection Agency, Region (EPA), the U. S. Fish and Wildlife Service (FWS), the Department of Wildlife, Fisheries & Parks (DWFP) and the Department of Environmental Quality (DEQ) with reference to the following:

I. PREAMBLE

A. Purpose: The purpose of this Mitigation Bank Agreement is to establish guidelines and responsibilities for the establishment, use, operation, and maintenance of the Mitigation Bank. The Mitigation Bank will be used for compensatory mitigation for unavoidable impacts to Waters of the United States, including wetlands, which result from activities authorized under Section 404 of the Clean Water Act, provided such use has met all applicable requirements and is authorized by the appropriate authority or authorities.

B. Location and Ownership: , owns acres of land approximately miles County, Mississippi (Attachment 1), and the Sponsor has developed a plan to establish and maintain acres of bottomland hardwood wetlands as a Mitigation Bank.

C. Project Description: Under this Mitigation Bank Agreement, the Sponsor will establish acres of bottomland hardwood wetland and associated habitat in accordance with the provisions of this Mitigation Bank Agreement and the Mitigation Bank Restoration Plan (Attachment 2) and shall then maintain the Mitigation Bank in such condition in accordance with the Mitigation Bank Closure Plan (Attachment 6) until all credits are sold. The Mitigation Bank shall consist of a total of acres and include acres of bottomland hardwood wetlands and acres of DESCRIBE OTHER TYPES OF WETLANDS. (Access roads take up acres of the site, while acres are occupied by low ridges.)

D. Baseline Conditions: The Mitigation Bank is located approximately miles of in County/Parish, STATE in (parts of) Section(s) , and in Township North/South, Range East/West (Attachment 1 and Figure 1). It lies within the DESCRIBE BANK SITE.

The site consists of DESCRIBE CURRENT LAND USE. Further, based on a field investigation conducted with the Corps - Vicksburg on DATE, the Mitigation Bank has been determined to have hydric soils and is capable of having wetland hydrology restored by DESCRIBE HOW HYDROLOGY WILL BE RESTORED. The Natural Resources Conservation Service (NRCS) has determined that the Mitigation Bank is (Attachment 7).

E. Credits: In accordance with the provisions of this Mitigation Bank Agreement and upon the satisfaction of the success criteria contained herein, credits will be available to be used

as mitigation in accordance with the schedule detailed herein in Section IV, subsection D, of this Agreement. Credits will be used by the Mitigation Bank Sponsor and/or sold to third parties.

F. **Mitigation Bank Review Team:** The Mitigation Bank Review Team (MBRT) will consist of:

1. U. S. Army Corps of Engineers, Vicksburg District (Chair)
2. U. S. Environmental Protection Agency, Region ____
3. U. S. Fish and Wildlife Service
4. STATE Department of Wildlife, Fisheries & Parks
5. STATE Department of Environmental Quality.

G. **Disclaimer:** This Mitigation Bank Agreement does not, in any manner, affect statutory authorities and responsibilities of the signatory parties.

H. **Attachments:** Mitigation Bank Agreement:

1. Attachment 1: Mitigation Bank Location and Service Area
2. Attachment 2: Mitigation Bank Restoration Plan
3. Attachment 3: Crediting and Debiting Procedures
4. Attachment 4: Mitigation Covenants
5. Attachment 5: Financial Assurances
6. Attachment 6: Mitigation Bank Closure Plan
7. Attachment 7: NRCS Cropland Determination

II. AUTHORITIES

The establishment, use, operation and maintenance of the Mitigation Bank is carried out in accordance with the following authorities:

- A. Clean Water Act (33 U.S.C. 1251, *et seq.*)
- B. Rivers and Harbors Act (33 U.S.C. 403)
- C. Fish and Wildlife Coordination Act (16 U.S.C. 661, *et seq.*)

- D. Regulatory Program of the Corps of Engineers, Final Rule (33 CFR, Parts 320-330)
- E. Guidelines for Specification of Disposal Sites for Dredged and fill Material (40 CFR, Part 230)
- F. Memorandum of Agreement between the Environmental Protection Agency and the Department of the Army concerning the Determination of Mitigation under the Clean Water Act, Section 404 (b)(1) Guidelines (February 6, 1990)
- G. Federal Guidance for the Establishment, Use, Operation, and Maintenance of Mitigation Banks (60 CFR, Part 58605, *et seq.*)

NOW, THEREFORE, the parties agree to the following:

III. ESTABLISHMENT OF THE MITIGATION BANK

A. **Sponsor Agreement:** The Sponsor agrees to perform all necessary work, in accordance with the provisions of this Mitigation Bank Agreement, to establish and / or maintain _____ acres of _____ wetland habitat as described in Attachment 2, until it is demonstrated to the satisfaction of the agencies represented in the MBRT (acting through the Chair) that the project complies with all conditions contained herein, or until all credits are sold, whichever is later. Work shall include implementing the Mitigation Bank Restoration Plan (Attachment 2).

B. **Environmental Documentation:** The Sponsor will obtain all appropriate environmental documentation, permits or other authorizations needed to establish and maintain the Mitigation Bank. This Mitigation Bank Agreement does not fulfill or substitute for such authorization.

C. **Sequence of Establishment:** Establishment of the Mitigation Bank will be performed as described in the Mitigation Bank Restoration Plan (Attachment 2) and the credits will become available in accordance with the schedule specified in Section IV, subsections D - F, of this Mitigation Bank Agreement. In the event the Sponsor determines that modifications must be made to the Mitigation Bank Restoration Plan to ensure successful development of habitat within the Mitigation Bank, the Sponsor shall submit a written request for such modification to the MBRT, through the Chair, for approval. Documentation of implemented modifications shall be made consistent with Section III, subsection F, of this document.

D. **Financial Assurance Requirements:** the Sponsor agrees to provide the following financial assurances for the work described in this Mitigation Bank Agreement:

Prior to accepting mitigation payments pursuant to this Agreement, the Sponsor shall establish a financial mechanism for the Mitigation Bank to guarantee compliance with this Agreement. Such financial assurance will be in the form of an escrow account / letter of credit established at a federally insured depository that is well- or adequately-capitalized as defined in Section 38 of the Federal Deposit Insurance Act. The escrow account funds / letter of credit, equivalent to DOLLAR AMOUNT per acre for every acre contracted for use as mitigation shall

be placed in the escrow account / letter of credit upon receipt of payment from permit recipients. Funds shall not be utilized for the performance of actions specified in this Agreement and shall be released by the financial institution only upon written notification from the Corps - Vicksburg. The Corps - Vicksburg shall, within a reasonable time frame, provide authorization to the Sponsor and financial institution to release to the Sponsor appropriate funds as success criteria are met or at the time of the sale of any property.

If the Corps - Vicksburg believes that the Sponsor is in default, it must provide written notice to the Sponsor, including a detailed description of the basis for the notice of default and a description of the actions necessary to come into compliance with the terms of this Agreement. In the event that the Sponsor is placed in default and refuses to come into compliance within a reasonable time of receiving written notice of being placed in default, all funds guaranteed by the escrow account / letter of credit pertaining to the tract or tracts for which the Sponsor has been placed in default shall be released by the NAME FINANCIAL INSTITUTION. Payment will be made to NAME CONSERVATION ENTITY by the financial institution administering the account within thirty (30) days of written notification by the Corps - Vicksburg that the Sponsor has been placed in default and has failed to come into compliance. If the Sponsor is not placed in default, the funds shall be reduced incrementally as success criteria are achieved in accordance with the following:

1. Upon verification by the MBRT that short-term success criterion # 1 has been met and that survival of the planted trees has exceeded __%, the Corps - Vicksburg, acting on behalf of the MBRT, shall advise the financial institution in writing, within thirty (30) days, to release __% of the funds in the account pertaining to this tract to the Sponsor.
2. Upon verification by the MBRT that short-term success criterion # 2 has been met for any given phase, the Corps - Vicksburg, acting on behalf of the MBRT, shall advise the financial institution, in writing, within thirty (30) days, to release __% of the original funds in the account pertaining to this tract to the Sponsor.
3. The remaining __% for each tract shall remain in the fund for a fifty (50) year period following the establishment of the Mitigation Bank to ensure attainment of the long-term success criteria specified in Section IV, subsection H, and to guarantee long-term maintenance, monitoring and, if necessary, corrective actions. The Corps - Vicksburg shall notify the Sponsor in writing of any failure to fulfill the obligations under this Agreement and shall allow the Sponsor a reasonable and adequate amount of time to come into compliance. The Corps - Vicksburg will only place the Sponsor in default if the above written notification is given, a reasonable and adequate amount of time is allowed for the Sponsor to come into compliance, and the Sponsor is unwilling to come into compliance. The Sponsor shall not be considered to be in default of any portion of this Agreement as long as it is willing to come into compliance and is taking reasonable steps to come into compliance.

E. Real Estate Provisions: The Sponsor shall record a Mitigation Covenant (Attachment 4) for the Mitigation Bank prior to certification of any credits. The Mitigation Covenant shall preserve the Mitigation Bank as wetland and wildlife habitat in perpetuity and will run with and be a burden on the land in perpetuity for landowners, their heirs or assigns, and all subsequent purchasers. The Mitigation Covenant shall stipulate that the Sponsor has entered into a plan with the signatory agencies (MBRT) for the establishment of the Mitigation Bank and that the Sponsor has agreed to the provisions specified in this Agreement.

1. A draft copy of the Mitigation Covenant shall be provided to the Corps - Vicksburg for review prior to filing. After filing, a copy of the recorded Mitigation Covenant, clearly showing the book, page, and date of filing, will be provided to the Corps - Vicksburg.

2. The Mitigation Covenant shall apply to the entire Mitigation Bank; the legal description of the area covered by the Mitigation Covenant will be updated upon implementation of new phases. The covenants and restrictions therein shall not prevent certain future uses of the property, including hunting, fishing, trapping, and non-consumptive recreational pursuits. The Mitigation Covenant shall run with the land and shall be binding on the Sponsor, the landowners and all future owners or users of the property, but shall be subject to modification through mutual consent by the Sponsor and the Corps - Vicksburg.

F. As-Built Reports: The Sponsor agrees to submit an as-built report for the Mitigation Bank ninety (90) days following completion of the establishment of the Bank. The as-built report will describe in detail any deviation from that described in the Mitigation Bank Restoration Plan (Attachment 2) and show finished grades and surface and groundwater elevations, as appropriate.

IV. OPERATION OF THE MITIGATION BANK

A. Service Area: This Mitigation Bank is established to provide mitigation to compensate for impacts to Waters of the United States, including wetlands, within the Corps of Engineers Vicksburg District in DESCRIBE REGION (Attachment 1). This area is demarcated by the United States Geologic Survey as hydrologic unit code _____ (i.e., the _____ River Basin). Decisions authorizing use of credits from the Mitigation Bank will be made by the appropriate authority on a case-by-case basis in accordance with all applicable requirements. Decisions to use the mitigation bank for project impacts outside the established service area and for out-of-kind compensation will be made on a case-by-case basis.

B. Access to Mitigation Bank: The Sponsor will allow, or otherwise provide for, access to the site to all signatory parties as necessary for the purpose of inspection and compliance monitoring consistent with the terms and conditions of this Mitigation Bank Agreement.

Inspecting parties shall provide reasonable notice of not less than twenty-four (24) hours to the Sponsor prior to inspection of the Mitigation Bank.

C. **Eligibility Requirements:** For projects requiring authorization under Section 404 of the Clean Water Act, the Corps - Vicksburg, in consultation with the other regulatory and resource agencies, will determine the eligibility of projects to use the Mitigation Bank on a case-by-case basis. In general, it is agreed that the Mitigation Bank will be used for impacts to bottomland hardwood (INCLUDE OTHER WETLAND TYPES, IF APPROPRIATE) and associated wetlands.

D. **Assessment Methodology and Schedule of Credit Availability:** Credits and debits will be assessed based on wetland acreage. The Sponsor will submit a request to the MBRT for their pre-approval 90 days before the establishment of the Bank.

Upon submittal of all appropriate documentation by the Sponsor and subsequent approval by the Corps - Vicksburg in consultation with other members of the MBRT, it is agreed that credits will become available for use by the Sponsor or for transfer to a third party in accordance with the following schedule:

_____ percent of the total number of anticipated credits for the Bank will become available for debiting upon approval of this Mitigation Bank Agreement by all members of the MBRT, placement of the restrictive covenants on the bank site, and the establishment of suitable financial assurances (as detailed in III. D., above) for construction and long-term maintenance.

_____ percent of the total number of anticipated credits will become available for debiting after the initial planting has been completed, provided that adequate financial assurances (as detailed in III. D., above) are maintained.

_____ percent of the total number of anticipated credits of each phase will become available for debiting after the wetland hydrology has been restored, provided that adequate financial assurances (as detailed in III. D., above) are maintained.

The remaining _____ percent of the total number of anticipated credits will become available for debiting after the successful attainment of short-term success criteria, as determined by a registered forester, a certified wetland scientist (SWS) or an inspection by the MBRT, provided that adequate financial assurances (as detailed in III. D., above) are maintained.

E. **Conditions on Debiting:** Any credits debited before achieving the short-term success criteria shall require the posting of financial assurances equal to DOLLAR AMOUNT per acre to cover contingency actions in the event of a partial or total failure. The form and amount of the assurances (such as the bonds or letters of credit outlined in III. D., above) shall be approved by the Corps - Vicksburg in consultation with the other members of the MBRT prior to posting. Upon meeting the success criteria, these assurances shall be released to the Sponsor.

F. Accounting Procedures: The Sponsor shall be responsible for keeping an up-to-date ledger of all transactions within the Mitigation Bank. The Sponsor shall submit a copy of this ledger to the Corps – Vicksburg, as Chair of the MBRT, by March 31 of each year following the initial planting. The Corps – Vicksburg will then distribute the ledger to other MBRT members. Additionally, the Sponsor shall submit a statement on any or all transactions to the Corps – Vicksburg, as authorizing agency, within thirty (30) days of receipt of a written request. The ledger shall document the following:

1. Name and permit number for each permit recipient who has contracted with the Sponsor for mitigation.
2. Date the contract was executed.
3. Credits Debited (acreage to be planted) on behalf of each permit recipient.
4. Total acreage (credits) planted each year for all permits mitigated, and acreage remaining to be planted.
5. Map showing the approximate boundaries of the planted tract.

G. Short-Term Success Criteria: The following criteria will be used to assess short-term project success:

1. Wetland hydrology (as defined by current *U. S. Army Corps of Engineers Wetland Delineation Manual* specifications) will be attained and maintained as described in the Mitigation Bank Restoration Plan (Attachment 2). Assessments will be made using primary and secondary indicators of wetland hydrology.
2. A ____ % survival rate of the planted tree seedlings, or ____ trees per acre, will be attained through the end of the five-year monitoring requirement of this Agreement. This criterion will apply to initial plantings as well as any subsequent re-plantings that may be necessary.

H. Long-Term Success Criteria: The following criteria will be used to assess the success of the project over the long-term:

1. The plant community must be comprised primarily of hydrophytic vegetation (as defined in the current *U. S. Army Corps of Engineers Wetland Delineation Manual*).
2. Planted tracts must exhibit characteristics and diversity of viable bottomland hardwood wetlands or communities, which are commensurate with site conditions, and the age of the stand. These will include:

a. Adequate understory and ground cover will become established within 5 years. This will consist of at least ____ understory species and ____ ground cover species on the site at the end of Year 5.

b. Until the canopy cover is ____% or greater, the minimum woody plant stem count will be ____ per acre.

c. The site will qualify as jurisdictional wetland by the end of Year 5.

3. No human activities that might require a Section 404 permit shall occur within the restored portions of the Mitigation Bank without obtaining a Section 404 permit from the Corps - Vicksburg and providing mitigation for any actual wetland loss. If a decision is made to authorize activities in previously planted portions of the bank, and such activities adversely affect the quantity and quality of functional wetlands, the permit recipient will be responsible for compensation for the direct loss of wetlands, past wetland impacts that are being mitigated by these wetlands, and all temporal losses associated with the re-establishment of new mitigation sites.

I. Provisions for Uses of the Mitigation Bank: The Sponsor shall not:

1. Grant additional easements, rights-of-way or any other property interest in or to the project areas without the written consent of the Corps - Vicksburg in consultation with the MBRT.

2. Use or authorize the areas within the Mitigation Bank for any purpose which could interfere with its conservation purposes other than those specified below. Hunting will not be considered a prohibited activity.

V. MAINTENANCE, MONITORING AND REPORTING

A. Maintenance Provisions: The Sponsor agrees to perform all necessary work to maintain the Mitigation Bank consistent with the maintenance criteria established in the Mitigation Bank Restoration Plan (Attachment 2). The Sponsor shall continue with such maintenance activities until closure of the Mitigation Bank. Upon closure of the Mitigation Bank, the Sponsor shall implement the management requirements established in the Mitigation Bank Closure Plan, where applicable. Deviation from the approved Mitigation Bank Restoration Plan is subject to review and written approval by the MBRT, acting through the Chair.

B. Monitoring Provisions: The Sponsor agrees to perform all necessary work to monitor the Mitigation Bank to demonstrate compliance with the success criteria established in this Mitigation Bank Agreement.

C. *Monitoring Reports:* Monitoring reports shall be provided to the Corps - Vicksburg no later than October 15th of each calendar year. The Corps – Vicksburg will distribute the report to the members of the MBRT. In the event monitoring reveals that initial success criteria have not been met, the Sponsor shall take measures to achieve the criteria the following year. Monitoring, reporting and remedial action shall be conducted in accordance with the following:

1. The Sponsor shall conduct annual surveys of living seedlings in each planted tract. Sampling shall be done between April 15th and September 15th following the initial planting of the tract. Seedling survival shall be documented by performing a comprehensive tally or by counting seedlings in rows selected at random from within the tract. The number and orientation of rows used in the sample will vary depending on the size and configuration of the tract but must be representative of the tract and must account for at least 5 percent of the total number of seedlings planted in that tract. In addition, the Sponsor shall perform a cursory examination of the entire planted tract to determine if overall survival rate is adequate.

2. The Sponsor shall, within 60 days following the survey, provide a written report to the Corps - Vicksburg. The report shall include, at minimum, the following:

- a. A U. S. Geological Survey topographic quadrangle with the Mitigation Bank indicated.

- b. A detailed narrative that summarizes the condition of the Mitigation Bank and all regular maintenance activities.

- c. Appropriate site maps that show the locations of sampling plots, permanent photographic stations, sampling transects, etc.

- d. Data regarding the hydrology of the Mitigation Bank (e.g., hydroperiod, extent and depth of inundation, groundwater monitoring results, precipitation records, etc.)

- e. Results of vegetational surveys, including the following: visual estimates of overall percent cover and of percent cover within each layer of vegetation; indices of species diversity; estimates of percent cover of exotic species within each layer of vegetation; composition of plant community (wetland indicator status); calculations of survival for planted trees; estimates of natural re-vegetation; and estimates of plant vigor (as measured by evidence of reproduction).

f. Results of surveys of wildlife usage of the site (e.g., observations of amphibians, reptiles, mammals, birds and macroinvertebrates on or near the Mitigation Bank).

g. Descriptions of the condition of applicable drainage ditch plugs and water control structures.

h. A discussion of likely causes of observed tree mortality within those tracts that did not exhibit a survival rate for planted seedlings of at least ____ % (____ trees per acre).

3. If survival (as determined by sampling or observing high mortality within any zone or location within a planted tract) is less than ____ planted trees per acre, the Sponsor shall take appropriate actions, as recommended by the MBRT to address the causes of mortality and shall replace all dead seedlings with new seedlings of the appropriate species during the following non-growing season. Replanting, in accordance with this paragraph, and monitoring and reporting, as described in paragraphs 1 and 2 of this section, shall occur yearly thereafter as needed to achieve and document the required survival rate for five consecutive years.

4. The Sponsor shall continue annual monitoring and reporting of each planting effort, in accordance with the Restoration Plan, to verify the presence of a minimum of ____ planted trees per acre (____ %) for a minimum of five years. Annual reports will be provided to the Corps – Vicksburg for distribution to the MBRT members.

5. The Sponsor shall not be responsible for replacement of seedlings or trees when mortality is due to an act of God or other force majeure event (other than beaver predation) that occurs after the initial criteria are met. The management or mitigation potential may be adjusted by the MBRT at any time should an Act of God or human-induced activity adversely affect the value or functioning of the mitigation bank. Any adjustments to the management or mitigation potential will apply only to future planting within the bank and will not affect those tracts that have already been planted.

VI. CORRECTIVE ACTIONS

A. Contingency Plans / Remedial Actions: In the event the Mitigation Bank fails to achieve the short-term success criteria specified in IV. D. of this Mitigation Bank Agreement, the Sponsor shall develop necessary contingency plans and implement appropriate remedial actions for the Mitigation Bank in coordination with the MBRT. In the event the Sponsor fails to implement necessary remedial actions within 45 calendar days after notification by the Corps - Vicksburg of necessary remedial action to address any failure in meeting the success criteria, the

MBRT (acting through the Chair) will notify the Sponsor and the appropriate authorizing agencies and recommend appropriate remedial actions.

B. *Completion of Corrective Actions:* At the request of the Sponsor, the MBRT will perform a final compliance visit to determine whether all success criteria have been satisfied. Upon satisfaction of the success criteria, any remaining contingency funds will be released to the Sponsor.

C. *Deficits:* If the authorizing agencies determine that the Mitigation Bank is operating at a deficit, debiting of credits will immediately cease, and the authorizing agencies, in consultation with the MBRT and the Sponsor, will determine what remedial actions are necessary to correct the situation. As determined by the Chair, in coordination with the MBRT and the Sponsor, if conditions at the Mitigation Bank continue to deteriorate or do not improve within a reasonable time frame from the date that the need for remediation was first identified in writing to the Sponsor by the Chair of the MBRT, the Contingency Funds (as described in III.D.) and the long-term management funds (as described in Attachment 5) shall be transferred to the NAME FINANCIAL INSTITUTION and will be used to undertake corrective measures.

D. *Non-Compliance:* In the event the Sponsor does not comply with this Agreement or the Mitigation Covenant (Attachment 4), the Sponsor will be required to immediately perform corrective actions (e.g., replanting and repair or replacement of water control structures). The Corps - Vicksburg will then convene a meeting with the Sponsor and the MBRT to determine if a reassessment of the management or mitigation potential is necessary. If remedial action is not taken within one year, the MBRT will cease recognition of the Mitigation Bank, and the Sponsor will be required to implement mitigation, as approved by the Corps - Vicksburg, to replace all mitigation which had been performed at the Mitigation Bank, but was not successful. Alternatively, if placed in default, failure by the Sponsor to replace mitigation will result in forfeiture of the portion of the letter of credit or funds pertaining to the tract(s) for which the Sponsor has been placed in default.

E. *Adjustment of Mitigation Potential:* The management or mitigation potential may be adjusted by the MBRT at any time should any activity adversely affect the value or functioning of the Mitigation Bank. Any adjustments to the management or mitigation potential will, except as noted below, apply only to future plantings within the bank and will not affect those tracts that have already been debited.

Should the MBRT determine that an activity or activities authorized in planted or unplanted tracts within the Mitigation Bank would likely affect the mitigation potential of the Mitigation Bank, the MBRT shall coordinate with the Sponsor and reevaluate the mitigation potential. The reevaluated mitigation potential will not affect acreage that has already been planted but will be used to determine the appropriate acreage to plant for future activities using the Mitigation Bank as compensatory mitigation.

VII. LONG-TERM MANAGEMENT OF MITIGATION BANK

A. *Long-Term Management:*

The Sponsor, its heirs, assigns or successors, shall be responsible for maintaining and protecting lands contained within the restored portions of the Mitigation Bank in perpetuity, unless the bank lands are transferred to a state or federal resource agency or non-profit conservation organization or this responsibility is contractually conveyed to another person, subject to approval by the MBRT. The MBRT shall not unreasonably withhold authorization of transfer of long-term maintenance and protection to another person.

B. *Impacts to Mitigation Bank:* After restoration, wetlands within the Mitigation Bank will be jurisdictional and will therefore be subject to all applicable requirements established under the Clean Water Act (CWA). As such, permits from the Corps - Vicksburg will be required for the deposition of dredged or fill material, including mechanized land clearing, in these areas. All requests for permits within the mitigation bank will be coordinated with the MBRT; however, decisions regarding the issuance of such permits will be made by the Corps of Engineers in accordance with applicable permit regulations and guidance.

C. *Mitigation for Impacts to Mitigation Bank:* If impacts to planted portions of the Mitigation Bank are permitted, the permittee will be required to compensate for the loss of wetland values associated with the project, past wetland impacts that are being mitigated by these wetlands, and all temporal losses associated with the re-establishment of new mitigation sites. The amount of compensation required will be based upon the acreage of wetlands actually impacted. Impacts to wetlands within the Mitigation Bank shall be mitigated by planting the appropriate acreage within the Mitigation Bank if sufficient unplanted acreage is available. In cases where sufficient unplanted acreage is not available, the permittee will be responsible for fulfilling all or part of his compensatory mitigation requirement elsewhere, as approved by the Corps of Engineers - Vicksburg.

D. *Timber Management:* INCLUDE TIMBER MANAGEMENT PLAN OR STATEMENT THAT THERE WILL BE NO TIMBER MANAGEMENT PLAN.

VIII. RESPONSIBILITIES OF THE MBRT

A. The agencies represented on the MBRT agree to provide appropriate oversight in carrying out provisions of this Mitigation Bank Agreement.

B. The agencies represented on the MBRT agree to review and provide comments on all project plans, annual monitoring reports, credit review reports, contingency plans, and necessary permits for the Mitigation Bank in a timely manner. Comments on the monitoring reports and credit review reports will be reviewed within ninety (90) calendar days from the date of complete submittal, except for good cause.

C. The agencies represented on the MBRT agree to review and confirm reports on evaluation of success criteria prior to approving credits in the Mitigation Bank.

D. The agencies represented on the MBRT shall conduct compliance inspections, as deemed necessary by the Corps - Vicksburg in consultation with the Sponsor, to verify credits available in the Mitigation Bank, and recommend corrective measures (if any), until the terms and conditions of the Mitigation Bank Restoration Plan have been determined to be fully satisfied or until all credits have been sold, whichever is later.

E. The agencies represented on the MBRT shall authorize the Sponsor to market and sell mitigation credits to individuals, entities, and governmental agencies.

F. The agencies represented on the MBRT shall abide by the terms and conditions of this agreement.

IX. OTHER PROVISIONS

A. ***Force Majeure:*** The Sponsor will not be responsible for Mitigation Bank failure that is attributed to natural catastrophes such as flood, drought, disease, regional pest infestation, etc., that the MBRT, acting through the Chair, determine is beyond the control of the Sponsor to prevent or mitigate.

B. ***Dispute Resolution:*** Resolution of disputes about application of this Mitigation Bank Agreement shall be in accordance with those stated in the Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (60 F.R. 58605 *et seq.*, November 28, 1995).

C. ***Validity, Modification, and Termination of the Mitigation Bank Agreement:*** This Mitigation Bank Agreement will become valid on the date of the last signature. This Mitigation Bank Agreement may be amended or modified with the written approval of all signatory parties. Any of the MBRT members may terminate their participation upon written notification to all signatory parties. Participation of the MBRT members will terminate 60 days after written notification.

D. ***Specific Language of this Mitigation Agreement Shall be Controlling:*** To the extent that specific language in this document changes, modifies, or deletes terms and conditions contained in those documents that are incorporated into the Mitigation Bank Agreement by reference, and that are not legally binding, the specific language within the Mitigation Bank Agreement shall be controlling.

ATTACHMENT 1
Mitigation Bank Location and Service Area

Attachment 2: Mitigation Bank Restoration Plan

1. Introduction

The proposed Mitigation Bank consists of ____ acres of DESCRIBE CURRENT SITE CONDITIONS.

2. Site Preparation

This site formerly consisted of _____. _____ additional work will be required to prepare this site for use as a Mitigation Bank. DESCRIBE NECESSARY WORK.

DESCRIBE EACH AREA OF THE BANK, TYPES OF HABITAT, AND TYPES OF MITIGATION EACH WILL PROVIDE.

DESCRIBE ANY EXISTING ROADS, UPLAND AREAS, ETC. NOT PREVIOUSLY DESCRIBED.

Vegetative Planting Schedule

The planting of bottomland hardwood tree seedlings on the Mitigation Bank will be done as follows:

Trees to be Planted

DESCRIBE SPECIES OF TREES AND OTHER VEGETATION TO BE PLANTED, AS WELL AS WHAT AREA WITHIN THE BANK WILL BE PLANTED WITH EACH SPECIES.

Trees will generally be planted randomly within each tract. However, final determinations for the locations of the trees will be determined in the field; each tolerance to water will be related to the final elevations of the site.

Planting Specifications

1. Trees will be planted on approximately ____-foot centers (a density of approximately ____ stems per acre).
2. Planting will be done between November 1 and April 1.
3. Seedlings will be planted with the root / stem interface immediately at the finished landscape grade.

4. Seedlings will be kept moist throughout the planting procedure.
5. Each seedling will be fertilized with a 21-gram tablet of 20-10-5 fertilizer (or similar) according to the manufacturer s recommended rate.

Proposed Hydrologic Restoration

DESCRIBE HOW HYDROLOGIC RESTORATION WOULD BE ACCOMPLISHED WITHIN EACH AREA OF THE BANK, OR STATE THAT HYDROLOGIC RESTORATION IS NOT NECESSARY AND DESCRIBE EXISTING HYDROLOGIC REGIME.

Attachment 3: Crediting and Debiting Procedures

Credits within the Mitigation Bank will be debited based on the Charleston Method for determining compensatory mitigation for wetland impacts associated with approved projects. This method was developed jointly by the Charleston District of the Corps of Engineers and the U.S. Fish and Wildlife Service. Any project within the Service Area for which mitigation at the Mitigation Bank has been approved shall be mitigated within the ____ acres of bottomland hardwood wetlands (additional mitigation areas or higher mitigation ratios may be required, depending on such factors as the quality of the impacted resource, etc.). At the discretion of the MBRT, wetland mitigation for projects outside the Service Area may be also be approved using the Charleston Method. **ALSO DESCRIBE ANY OTHER TYPES OF MITIGATION CREDITS WHICH WOULD BE SOLD, I.E. UPLANDS OR PRESERVATION.**

For the purposes of determining the number of credits to be debited, impacted acreage will be rounded up to the nearest 0.5 acre. For example, a minimum of one credit within the Mitigation Bank must be purchased to compensate for each acre of impacts to wetlands within the Service Area.

Credits may be debited in accordance with IV. D. of the Mitigation Bank Agreement. Additionally, the Mitigation Covenant or Declaration of Restrictive Covenants must be recorded for the phase in which any approved credits will be sold.

Attachment 4: Mitigation Covenant

The property (see attached legal description) located in portions of Section(s) ____ and ____, Township ____ North/South, Range ____ East/West, in _____ County/Parish, STATE (Exhibit A), described herein as the _____ Mitigation Bank is being used to mitigate for the loss of wetland functions and values. As agreed by the landowner and the Corps of Engineers, Vicksburg District, the following Mitigation Covenant has been placed on this property:

1. Vegetation. After establishment of hardwood trees (AND OTHER VEGETATION), there shall be no cutting, removal, destruction, mowing, application of biocides, disturbance, or other change to vegetation on the Mitigation Bank except as provided under Attachment 8.

2. Uses. There shall be no agricultural (to include grazing by domestic livestock), commercial, or industrial activities allowed on the Mitigation Bank. This restriction does not apply to hunting or fishing activities in accordance with state law or to farming activities on the portions of the property that have not been debited for use as mitigation credits.

3. Buildings. There shall be no construction or placement of buildings or other structures on the mitigation site.

4. There shall be no construction of new roads on the Mitigation Bank. However, the existing roads will remain in place and can be maintained as necessary as long as their area of impact is not altered.

This Mitigation Covenant may be modified only upon mutual written agreement between the Sponsor (landowner) and the MBRT, acting through the Chair.

A copy of the Mitigation Covenant will be provided to the Corps - Vicksburg for review prior to filing. After filing, a copy of the recorded covenant, which clearly shows the book, page, and date of filing, will be provided to the Corps - Vicksburg.

This instrument may be executed in any number of counterparts, each of which shall be considered an original for all purposes.

WITNESS THE EXECUTION hereof by the parties on this the ____ day of _____, 200_.

PROPERTY OWNER

PERMITTEE

BY: _____
PERMITTOR

UNITED STATES ARMY CORPS OF ENGINEERS

BY: _____

Attachment 5: Financial Assurances

The following financial assurances have been provided for this project:

1. Bond to cover the costs associated with site preparations (if necessary) in the amount of DOLLAR AMOUNT. This bond will be released to the Sponsor upon meeting the success criteria in IV. G. and H of this agreement.

2. Letter of Credit / Escrow Account in the amount of DOLLAR AMOUNT to cover long-term maintenance and monitoring of the Mitigation Bank. The parties to this Agreement acknowledge the long-term maintenance and monitoring costs as well as contingency costs for any necessary replanting of the site. This Letter of Credit / Escrow Account will be reduced according to the following schedule (outlined in greater detail in III. D. of the Mitigation Bank Agreement):

1. The Letter of Credit / Escrow Account will be reduced by ____% of its original value (by returning these funds to the Sponsor) upon satisfactory attainment of short-term success criteria 1, 2 and 3.

2. The Letter of Credit / Escrow Account will be reduced by ____% of its original value (by returning these funds to the Sponsor) upon satisfactory attainment of short-term success criterion # 4.

3. The remaining escrowed funds / credit will be maintained for a period of 10 years to cover contingencies associated with long-term maintenance of the Mitigation Bank.

Executed copies of these documents are attached.

Attachment 6 - Mitigation Bank Closure Plan

For purposes of this Agreement, bank closure will refer to the point when all available credits have been sold and all short- and long-term success criteria (outlined under IV. G. and IV. H. of the Mitigation Bank Agreement) have been met and the long-term maintenance funds (held under a letter of credit / escrow account) have been held for a period of 10 years. Upon agreement by the members of the MBRT that all criteria established within the Mitigation Bank Agreement and its Attachments have been met, all remaining funds within any contingency accounts (such as an escrow account or Letter of Credit) will be returned to the Sponsor.

ATTACHMENT 7
NRCS Cropland Determination